

A STUDY OF SOME OF THE FEATURES OF THE
SPOKEN LANGUAGE OF TEACHERS OF CHILDREN
BETWEEN THE AGES OF THREE AND SEVEN
YEARS.

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TABLE OF CONTENTS

1. Abstract of thesis.
2. Introduction.
3. Prosodic and Paralinguistic features
 - Section I Prosodic features
 - Section II Paralinguistic features
4. Extra-linguistic features.
5. Conclusion.

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ABSTRACT OF THESIS

This thesis puts forward a description, in terms of prosodic and paralinguistic features, of the type of English used by teachers of children between the ages of three and seven years. Time did not allow an investigation of grammar and lexis, unfortunately, but the study revealed many interesting features that seemed characteristic of this use of language. Most of these features reflected apparent problems faced by the teachers; contrast and variation attracted and held the child's attention, and emphasis of various sorts underlined the patterns of English, important information or instructions. It was hoped that enough material would be found to allow this type of English to be classified as a register. However, in spite of the large number of distinctive features recorded, too many individual characteristics appeared, obscuring some of the identifying features and weakening the picture of a clearly defined and recognisable variety of English. Perhaps a study of those areas not discussed here will reveal new information that will enable this aim to be realised.

INTRODUCTION

This thesis presents a description of English as used by teachers of children between the ages of three and seven. As a result of this study, I hope to be able to classify this variety of English as a register. Of this process A. Philp wrote: "The concept of register variation concerns the way in which certain linguistic features (usually of vocabulary, but often of grammatical and occasionally involving the sound - or writing - systems) tend to co-occur with certain aspects of the situation in which they were produced. In those cases in which we can isolate a set of linguistic features as typical of the usage found in one specific type of situation we can talk of those features as constituting the register of that situation." (1) The aim of this dissertation is to identify such features.

- (1) Andrew Philp: "Some notes on the informal study of register". Educational Review, Volume 22, Number 1, November 1969. P.94.

THE THEORY OF REGISTER

The theory of register has its beginnings in the work of the anthropologist Bronislaw Malinowski - in his theory of "context of situation". His theory, it seems, was prompted by his difficulty as an ethnographer, in translating from a spoken foreign tongue into his native language (English). He found that "Complex problems of meaning ... led from mere linguistics into the study of culture and social psychology" - and it is from the theory he formed to support this, that the current concept of register has grown. It is, however, an unfortunate fact that when he wrote the two works: "The Problem of Meaning in Primitive Languages" (2) and Coral Gardens and their Magic (3), in which his theory was propounded, Malinowski's enthusiasm led to inconsistencies in his arguments. Basically, though, his theory is important and valuable in the study of language.

- (2) Supplement to Meaning of Meaning - C.K. Ogden and I.K. Richards. Routledge and Kegan Paul Ltd, 1923.
- (3) Allen and Unwin Ltd, 1935.

Malinowski insisted that above all, language is pragmatic. Its primary function is not as a countersign of thought, but as a mode of action in itself. The essential use of language is "speech-in-action". To prove this, Malinowski cited the child learning to use his language. At first the child acts by sound alone; he attracts the attention of others by making a noise. Here, the child acts "in a manner which is both adapted to the outer situation, to the child's mental state, and which is also intelligible to the surrounding adults".

(4) The significance of the sound is in this case identified with the active response to surroundings. "The existence of a social milieu surrounding the child is a factor of fundamental biological importance in the upbringing of the human young and it is also an indispensable element in speech formations. To the child, words are therefore not only a means of expression, but efficient modes of action... In all the child's experience, words mean in so far as they act and not in so far as they make the child understand or apperceive ... the name of an object is the first means resorted to, to attract, to materialise this thing". (5)

(4) "The Problem of meaning in Primitive Languages".

(5) Ibid

From these actions we learn to rely on our language as a vital part of "concentrated human action". It is rooted "in the tribal life and customs of a people". With its roots in the reality of culture, Malinowski sees language as a great barrier to successful translation. He explains that it is because the concepts and cultures of two races are never found exactly the same, and thus to understand a 'foreign' word, one must have an "ethnographic account of sociology, culture and tradition" of the community concerned. In supporting this contention, he quotes a Kirwinian text, giving as well a word for word English translation which, as one might expect, makes very little sense. This is his basis for the following statement: "In analysing it [the text] we shall see quite plainly how helpless one is in attempting to open up the meaning of a statement by mere linguistic means". Had he not equated "linguistic means" with a verbatim translation, Malinowski may well have bolstered his case as he wished. But, surely, a translation of the sort he mentions is only part of such means - only a starting point for the linguist. The argument he offers does, perhaps, stem from his position as an outsider

looking into a foreign language, but it still weakens a theory which does hold a remarkably valuable insight for linguists. He follows the argument through to the bitter end, concluding with the following statement, which really needs no further comment: "the meaning of any single word is to a very high degree dependant on its context", and "becomes only intelligible when it is placed within its context of situation".

Context of situation as Malinowski understood it involved two concepts. He saw the utterance as belonging firstly to a special context of culture, and then to the situation prevailing at the time the words were spoken. The second part of this concept was a combination of words, facial expressions, bodily activities and gestures, the people present, and the environment. Knowing these circumstances, Malinowski claims, utterances can be understood quite accurately. But he continues: "the conception of meaning as contained in an utterance is false and futile. A statement, spoken in real life, is never detached from the situation in which it has been uttered." A word without linguistic context of the Malinowskian type is a "mere figment and stands for nothing by itself" ... the utterance has no meaning

except in context of situation" (6) Here we can see the dangers encountered in expounding a new theory. Malinowski, his perception clouded by enthusiasm, has come to believe that the total significance of a word is lent it by its context. But can we really see a word as having no lexical meaning at all, with no referential meaning out of its context? As observers, we can see the weaknesses in Malinowski's arguments, but we must not ignore the good and potentially useful material that is also presented there.

Professor J.R. Firth adopted Malinowski's idea of context of situation, expanding it to suit his own theories. He did not follow the ethnographer in taking the concept to mean the context of human activity concurrent with, immediately preceding and following the speech act; but instead saw it as the whole cultural setting in which the speech act is embedded. Instead of discarding the lexical meaning of words entirely, Firth claimed that context used to describe the function words fulfilled was more important than their referential meaning. He recognised the inadequacies of the word being devoid of meaning in itself, and still made the context of situation the central idea in his thinking.

(6) The Problem of Meaning in Primitive Languages.

Recognising the infinite variety of English sentences, Firth formed a new idea - the concept of typical contexts of situation. This label covers the social situation in which people may find themselves at any given moment. This situation determines the social role of each of the participants. Firth wrote: "Semantics is not the study of speech in contexts of situation of the Malinowskian type, but rather of speech in typical contexts". Semantics, now, becomes the study of those speech styles which are appropriate to specific social roles that people play. The number of typical contexts of situation that a speaker will encounter is finite, but as he changes roles, the speech style varies, as much as the meaning of his words acquires a new colour. For Firth, to study context meant to describe the function of words in their environment. Firth then continued: "The multiplicity of social roles we have to play involves a certain degree of linguistic specialisation. Unity is the last concept that should be applied to language ... There is no such thing as 'une langue une' and there never has been" (7) Firth opens himself to attack here,

(7) "Technique of Semantics" - Papers in Linguistics,

J.R.Firth. Longmans.

but the point he intends to make is obvious. There are different types of language, one must agree; the language of the law courts is definitely not the same as, say, that of advertising. It has been argued by D. T. Langendoen (8) that the statement could be interpreted as indicating that the greeting "good day" for example, is totally unrelated to the farewell "good day". However, in spite of this, Firth has presented us with the basis for today's descriptive approach to language.

The characteristic differences between various types of English, recognised by Firth, allow the modern linguist opportunity to study his field in convenient sections, each one related to the many functions language is called upon to perform. Firth's typical contexts of situation, correspond very nearly with the modern concept of register - language defined according to use. A.E. Darbyshire explained the term register as "a variety of the use of language as used by a particular speaker or writer in a particular context" having first stated that "any use of language exists in context or in some situation which calls forth the utter-

(8) The London School of Linguistics, D.T.Langendoen.

ances made in language". (9) The concept is closely tied to the knowledge that language does not exist in a vacuum - it is always related to the individual writer or speaker and the linguistic circumstances prompting his linguistic action. In "The Linguistic Sciences and Language Teaching" (10) it is mentioned that this relationship shows a clear pattern involving three principal levels: substance, form and context. "The substance is the raw material of language auditory (phonic substance) and visual (graphic substance). The form is the internal structure. The context is the relation of language, its 'form', to other features of the situations in which language operates". [Ibid] Contexts, then, provide an external patterning that is indispensable when we come to discuss what people do with their language.

Malinowski's context of situation has progressed through Firth's "Typical Contexts of Situation" to

(9) A Description of English, A.E. Darbyshire, Arnold, 1967.

(10) The Linguistic Sciences and Language Teaching, Halliday, McIntosh and Stevens. Longmans Publication, 1968.

the theory of register which some linguists regard as being most important in the study of language.

DESCRIPTION OF CORPUS

In studying these registers, it is the intention of the researcher to pinpoint those features which give each type of English its distinct characteristics. In general observation, a native speaker can hear changes in register. The difficulty arises in defining why he feels it different. One way of investigating these difficulties is to study a corpus of tape recordings. They must, first, be clear and natural - and immediately the linguist's problems begin. The presence of a tape recorder affects people to the extent that consciousness of speech renders their utterances unnatural. A further obstacle is, of course, the inaccessibility of many situations, for example the language used by a doctor in surgery. In choosing the English of teachers of young children between the ages of 4 and 7 years, I have been able to avoid two of these problems. Access was relatively easy, and the problem of unnatural behaviour solved itself - once a teacher was confronted with a class of young children her

attention seemed fully occupied. The only difficulty left was that of background noise. The recordings used in my research were chosen from a group of about 25 tape recordings, because they were most clear, and because the teachers spoke for most of the lesson. The corpus was made up of eleven recordings of primary school and kindergarten teachers at work with their pupils. Two of these were broadcast programmes aimed at children of kindergarten age. (B1; B2) Four were recordings made in kindergartens (K1; K2; K3₁; K3₁₁; K4₁; K4₁₁). Five recordings were made in primary school class rooms (S1₁; S1₁₁; S2; S3; S4; S5) Throughout this thesis reference will be made to the recordings by their numbers: they will be arranged in numerical order, corresponding to the age of the child in the class, beginning with the youngest and ending with the oldest. The broadcast programmes will be placed between the schools and the kindergartens.

In several cases (K1; K2; K3₁; K3₁₁; K4₁; K4₁₁; S2; S3), a number of children were separated from the main body of the class and spoken to as a group. This, apparently, is not an unusual occurrence, but it did mean that there was a continual background noise from the rest of the class, which at times made the

speakers' voices difficult to hear.

The teachers who were recorded live seemed well used to classroom observers. The student kindergarten teacher (K3) was the only speaker who seemed nervous, perhaps because of the tape recorder being present or perhaps simply because she was a student being observed. Her nervousness was demonstrated by the tremulousness frequently heard as she spoke. Full permission to use the recordings was received from each speaker and, in the case of B1 and B2, from the broadcasting authorities, concerned.

The broadcast lessons were recorded first by the N.Z.B.C. in a large studio (40 feet by 20 feet). Two people were present in the studio, the speaker and a pianist. There was a rug on the floor under the microphone which was on a table. The speaker sat in front of it regarding it, in her imagination, as a child's face. In this way, it is hoped to avoid the 'talking down' which happens when physically looking down at a child. The speaker must also speak slowly, since she has no visual aids. Several screens were placed at strategic positions to blanket or reflect the sound of singing or speaking, or the sound of the piano. The recording sessions are usually stopped frequently - whenever ^{the} particip-

ants feel something is unsatisfactory. A producer and a technician sit in an adjacent control room behind a glass panel which allows vision both ways. Any sound effects on disc or tape are added in the control room. Occasional noises for animals, clocks, drums, whistles, eggbeaters and so on are made in the studio. The programmes were fully scripted, although the speaker changed them slightly as she felt the need. The programmes are aimed at the 3-5 year age group, but are apparently often used in primary schools, especially in the country, for new entrant classes as a link between home and school.

The kindergarten teachers were recorded in several kindergartens.

K1. This is a recording of a teacher and small group of children making Christmas hats. The number of children was variable as they tended to move about the room considerably. Generally about six children were in this group. A large part of this recording was taken up with the teacher's conversation with one child in the group. It must be emphasised that this was not a lesson on making these articles, but conversation arising from this

activity. The children were gathered about a table; the teacher was sitting at the head on a low chair. As the teacher turned her head to speak to children, her voice became louder and softer; this created a problem which must be borne in mind when discussing the system of prominence. The action was not restricted to this teacher; the difficulty was encountered in all the 'live' recordings.

K2. This is a recording of a story read to a group of 24 children outside under a tree. The children sat on a mat and the teacher on a low chair. Several pages of pictures were shown to the class in the middle of the story.

K3. This lesson was taken by the student teacher on section. Part I was a rhyme - a finger game. Part II was a story read to a group of 20 children, in a small room partitioned off from the main room by a sliding door. The children sat on a mat on the floor, and the teacher sat on a low chair. This story was suitable for the teacher to 'act' the parts played by the characters to a certain extent.

K4. This recording was made in the same kindergarten as K3, but this time the head teacher was the speaker. Again a finger game was used before the story. The story was rhyming and although read from a book was

obviously very familiar to both teacher and children. The many pictures in the book were shown to the class, who were again sitting on the mat as in K3. The group of children was the same in both these recordings. (K3 and K4). Part II of K4 is a discussion of the story in Part I.

S1. This is again a story, but this time, not read. The teacher told her story to a class of 33, five year olds. Some of the children had been at school for a term or more, others were new entrants. The speaker made use of a flannel board to illustrate the story as she told it. The class was again seated on the floor on a mat in front of the teacher. The teacher informed me that she varied the story to suit the class - to accommodate points she specifically wanted to emphasise. In this story she stressed mathematical points, and the idea of home and family. Part II was a reading lesson based on this story, using reading cards and the flannel board. A student teacher was present throughout, but as an observer only.

S2, ~~is~~ a reading lesson for a group of 14 new entrants. Four of the group had been at school for four weeks, ten for only two. The children were grouped on the floor on a mat in front of the teacher. The

rest of the class was given work to do on their own and remained in the room. During the recording the teacher found it necessary to address one of this background group. The lesson was in two stages, the first being a concentrated study of words beginning with the letter 'm', and the second the actual teaching of reading, making use of a book. This was not a story read to the class, but a step in teaching the children to read.

S3, is a maths lesson, using Cuisenaire rods and numbered cards. The teacher worked with a group of eight children who sat on a mat, in a circle, in front of her. The rest of the class ^{was} ~~were~~ otherwise occupied, some inside the classroom, and others just outside.

S4. This recording is a story again, read to a class of about 30 children. Discussion was encouraged throughout the reading and pictures were shown to the class frequently. Once again the pupils sat on a mat on the floor in front of the teacher.

S5. This is a recording of a "developmental" discussion. The teacher concerned had been conducting an experimental "development period" for the Education Department for the last two or three years. The children sat on a mat on the floor in front of their teacher.

The following tables show those facts about the speaker and the context which seem relevant. The first concerns the speakers only.

<u>Teacher</u>	<u>Approx. age</u>	<u>Other factors.</u>
K1	26	Assistant to headteacher of kindergarten
K2	26	Headteacher
K3	19	Student teacher on section
K4	27	Headteacher
Broadcasts	44	Training varied: Kindergarten College, speech, singing, opera, childrens' T.V. and radio programmes
S1	33	Supervisor of Junior Classes
S2	36	Considerable teaching experience
S3	24	Australian
S4	24	About 3 years' teaching exper.
S5	27	About 4 years' teaching exper.

All teachers examined here are women. Of 25 teachers recorded at first, only 1 was a man. That recording was unfortunately not audible and thus had to be rejected.

The following table indicates the situation under which each recording was made.

<u>Re- cord- ing</u>	<u>Room</u>	<u>Other factors</u>	<u>No.of child- ren</u>	<u>Aver. age of child</u>	<u>Lesson subject</u>
K1	large	child- ren and teach. at table	var- iable		Discussion
K2	out- side	small groups	20	4	Story read
K3I }	small	"	20	4	Finger game
K3II }	"	"	20	4	Story read
K4I }	"	"	20	4	Finger game and a rhym- ing story read
K4II }	"	"	20	4	Discussion of story
B1,2	large stud- io	pianist and sp- kr. only	-	3-5	Broadcast, scripted programme
S1I	large	full class	33	5	Story told
S1II	"	"	33	5	Reading lesson based on story
S2	"	small groups	14	5	Reading lesson
S3	"	"	8	5-6	Mathematics lesson
S4	"	full class	30	5-6	Story Read. Discuss- ion throughout
S5	"	"	35	6	"Developmental" disc- ussion.

teach. - teacher; spkr. - speaker

Certain features found in analysis of these recordings seemed confined in their occurrence to only one speaker, to any large extent. These features have been included in the voice set of the speaker.

The student kindergarten teacher (K3I, K3II), for example, spoke with considerable tremulousness in her voice, and, accordingly, it is mentioned as part of her voice set. The following list describes the normal voice set of each teacher:

K1	Educated New Zealand
K2	Educated New Zealand. Precise
K3	New Zealand. Frequent tremulousness. Fast
K4	New Zealand. Inverse breathy at times
Broadcasts	Educated New Zealand. Slow
S1	New Zealand. Slow
S2	New Zealand. Slow
S3	Australian New Zealand. High
S4	New Zealand. Nasal at times
S5	Educated New Zealand. Creaky on low stretches.

METHOD OF RESEARCH

Each recording studied in this thesis was analysed in terms of prosodic and paralinguistic features, using that method of analysis described in "Systems of Prosodic and Paralinguistic Features in English" by David Crystal and Randolph Quirk (11) I have, however,

- (11) "Systems of Prosodic and Paralinguistic Features in English", David Crystal and Randolph Quirk. Mouton and Co. 1964.

found it necessary to add ~~to~~ features to this system. The first is required to identify attempts by the speakers to imitate non-human sounds vocally. This I have labelled m = imitation. A ready example is found in B1 where the speaker imitates the quacking of a duck:

m1 q m q1 | quāck# - | quāck# m# m1# q# q1#

m = imitation

m1 = tense

q = nasal

(B1)

q1 = creaky

This feature did not occur very frequently, but does seem characteristic of this type of English, and was not covered by any term in Crystal and Quirk's system.

The second feature that needed labelling was what was heard as a 'swoop'. It was really an exaggerated nuclear movement, distinguishable from Crystal and Quirk's "wide" marking. Wide is the opposite of narrow; the swoops found in this type of English can be found on any type of nucleus, narrow or not. S2 offers an example:

φ a m m1 | ! might be on a m# street# m1# φ# a#

m = la+

(S2)

m1 = precise

The π marking is used to indicate this swooping, exaggerated nuclear movement.

The method of grammatical analysis used can be found in Professor R. Quirk's, 'The Use of English'. (12)

The recordings have been discussed under the following headings:

Section I. Prosodic Features - (i) Intonation

(ii) Pitch

(iii) Tempo

(iv) Prominence

(v) Tension

(vi) Rhythmicality

Section II. (1) Paralinguistic Features

(2) Pausing

(3) Extralinguistic Features.

This last heading covers those features that play an important part in the utterances, but which cannot be subsumed under the general labels of prosodic or paralinguistic features.

As is obvious from the above headings, I do not intend to discuss each text separately. By this means, I hope to avoid any examination of the speaker rather than

(12) "The Use of English". Longmans 1962, Chapter 11.

the utterance. It will also allow for compactness, and, it is hoped, afford valuable comparisons throughout this work.

The importance of the teachers' way of talking is indicated in the following extract: "The art of talking to children of various ages in appropriate language, neither talking down nor talking over their heads, can only be cultivated by long practice ... the art of talking, like all complex arts, must be learnt by experience". (13)

(13) 'Learning and Teaching'. Longmans 1954 -
A.G. and E.H. Hughes.

Section I (i): INTONATION

In "The Linguistic Sciences and Language Teaching"

(1) the authors state:- "Registers...differ primarily in form. Some registers, it is true, have distinctive features at other levels, such as the voice quality associated with the register of church services. But the crucial criterion of any given register are to be found in the grammar and lexis". Contrary to this statement, my research indicates that in this particular type of English, it is primarily intonation that distinguishes it from any other type. These characteristics of intonation will be seen in comparison with the tones of normal spoken English.(2) Professor Quirk and his co-authors worked with a total number of about 1,880 tone units. 3,583 tone units were heard in my research. The following table compares Professor Quirk's results and mine. The numbers shown are percentages.

- (1) "The Linguistic Sciences and Language Teaching", Halliday, McIntosh and Stevens. Longmans, 1968.
- (2) "Studies in the Correspondence of Prosodic to Grammatical Features in English". Proceedings of the Ninth International Congress of Linguists, Cambridge, May, 1962, Page 68/Quirk et alia.

<u>Intonation Pattern</u>	<u>Teacher's English</u>	<u>Quirk's Results</u>
Fall	44.3	40.9
Rise	37.8	23.9
Rise-fall	4.9	3.8
Fall-rise	3.04	6.7
Level	0.4	2.02
Rise + fall	7.4	0.6
Fall + rise	3.5	9.04

Quirk also noted 46 'doubtful' nuclei (2.4%). The nuclei recorded in the teachers' English were always clearly recognisable. The clarity of movement seems to be an obvious feature of this type of English and could perhaps be related to the educational responsibilities of the speakers.

Several other significant differences can be seen in the table above. Rises were more frequent among the teachers by almost 14%, and rise + falls by almost 7%. Quirk, on the other hand, found more fall-rises, levels and fall + rises. Perhaps the most interesting feature of the table is the number of rise + falls found in each variety of English. Professor Quirk classifies this compound nucleus as a minor type; among the teachers it was third most popular. The second obvious difference is the use of rising nuclei. Only 6.5%

separated rises and falls in the teachers' English, while 17% separated these same types in Professor Quirk's study. The rises and simple falls in Quirk's research accounted for 64.8% of the total number, while the same nuclei among the teachers covered 82.1% of the total. The more even distribution of the two types of nuclei among the teachers, suggests more scope for variation, a seemingly important feature in their use of English.

The use of level nuclei deserves mention. Of the twelve occurrences, only one was heard in a kindergarten lesson - in K4I :-

in a m |! little N ball#. |ānd # m# cr#
 ___f |!! rōlled'right-down#. (K4I) m = high

This combination of a drawled syllable and a level nucleus before a pause was heard on several occasions and will be discussed more fully in a later section. Five levels were heard in S2. Four of these were on exclamations or similar words:

|well #
 |mmm #
 |[[j:] #
 |[[j:m] # (S2)

The fifth occurs on a verb, in the following question:

m1 m |N where'did'he#, |rūn 'to # m# m1#

m = high + narrow

(S2) m1 = lax

The rather resigned tone here elicits no reply and the question is repeated in a brighter vein:

a p |where did he!! run to# a# p#

The other six level nuclei were found in B1 and B2.

Two of these (B1) were also marked "m = imitation".

The remaining four were used similarly to those mentioned above.

The following table shows the distribution of each type of nucleus. The numbers here are percentages.

	/	/N	\	\N	^	^N	∨	∨N	—	/ \	/N \	\ /	\N /
K1	11.1	11.9	32.5	20.6	6.4	.0	0.79	1.6	.0	0.8	4.8	6.4	3.2
K2	15.5	33.1	26.4	5.4	2.03	0.7	1.4	0.7	.0	2.7	7.4	1.4	3.4
K3I	17.3	21.2	25.0	5.8	1.9	.0	1.92	.0	.0	1.5	5.8	5.8	3.9
K3II	7.4	21.2	11.3	37.9	1.5	4.9	0.5	0.5	.0	1.9	9.9	.5	2.5
K4I	12.2	42.7	8.9	19.3	1.4	7.5	0.5	0.5	0.5	0.8	9.9	0.8	1.4
K4II	8.7	26.1	15.2	26.1	.0	8.7	.0	2.2	.0	.0	4.3	.0	6.5
B1	24.8	8.9	37.6	13.2	2.5	0.9	3.7	.0	1.2	4.6	1.8	2.5	0.3
B2	19.9	14.6	44.9	8.9	0.3	.0	5.2	0.3	0.6	3.7	1.5	2.8	1.8
S1I	26.4	14.7	28.9	12.1	3.55	1.02	0.6	.0	.0	4.6	5.1	3.6	1.01
S1II	22.2	14.9	32.6	7.1	10.02	2.2	3.9	0.4	.0	5.5	2.1	2.4	0.9
S2	25.6	16.2	29.9	18.8	0.9	1.3	2.1	0.2	.9	3.01	2.3	0.6	0.6
S3	22.7	16.1	39.3	9.5	1.2	0.4	0.8	0.8	.0	2.1	3.7	3.3	0.8
S4	31.4	15.3	26.5	11.7	5.7	0.6	3.01	.0	.0	3.6	1.9	1.1	.0
S5	12.5	14.9	36.3	14.3	4.7	.0	1.7	0.7	.0	6.1	3.4	2.7	3.1

It will be seen that there is a fairly even distribution of rises and falls, and of narrow rises and falls, thus avoiding monotony of nuclear movement. There were some exceptions to this general equality of distribution.

S5 tended more towards the distribution seen in adult conversation (see Quirk et alia) - perhaps because the class contained the oldest children included in this survey. In S5, 12.54% of the total number of nuclei were rises. Almost three times as many falls were recorded (36.27%). B1 and B2 also proved exceptions; using respectively, 24.77% and 19.87% rises and 37.61% and 44.95% falls. In this case it may be important to remember that the teacher had no children in front of her and was thus cut off from a normal classroom atmosphere. Under these circumstances it seems inevitable that some of the utterances used ^{would} tend to lose "teacher-pupil" characteristics and move towards features more appropriate to adult conversation. It is interesting to see that in two cases (K41 and S4) rises are more frequent than falls - this appears to be rather unusual.

Narrow falls and rises are less evenly distributed, although total figures do seem to belie this statement (13.82% and 17.55% respectively). However, in several recordings the numerical difference between the two

types is striking. K2, K3I, K4I, S1I and B2 showed a wider variation in quantities than the percentages above would lead one to believe.

But the frequent narrow nuclear movement appears an important feature of this type of English. 38.17% of the total number of tone units were marked narrow. The distribution is shown in the table above, but the following list indicates the extent to which narrow nuclei were found in each recording.

	<u>Total</u>	
K1	53	42.06 %
K2	75	50.67 %
K3I	19	36.54 %
K3II	156	76.85 %
K4I	173	81.27 %
K4II	34	73.91 %
B1	82	25.08 %
B2	89	27.28 %
S1I	67	34.01 %
S1II	141	23.77 %
S2	199	37.44 %
S3	76	31.41 %
S4	108	29.50 %
S5	106	35.93 %

The most obvious examples of narrowness can be found in K3II, K4I and K4II. K3II is a story read aloud by the teacher and of its total number of nuclei, 76.85% are narrow. K4I is also a story read by the teacher, with 81.27% of its 213 nuclei marked narrow. Both stories could be called 'sad', and the large number of narrow nuclei might well be due to this "minor key". However, it seems that the narrowness is not restricted by such a tonality: K4I with 73.91% marked narrow is a discussion of the story and its tone is not sad. K2, another story, is jaunty in its manner, and yet 50.67% of its total number of nuclei were narrow. It does seem, though that, on an average, kindergarten teachers make more use of narrow nuclei than do either the school teachers or the broadcast speaker. Amongst the school teachers, the highest number of ^{narrow} nuclei was found in S2 (37.44%). This is a lesson with five year old new entrants, the class closest to kindergarten. S1, the other lesson with five-year-olds shows a similar tendency with 34.01% of the nuclei narrow. S5, however, again proves our exception. 35.93% of the nuclei here were marked narrow, so it seems that we cannot restrict narrowness to the teachers of younger classes. It seems difficult, therefore, to put away any hard and fast rule to the use of narrow nuclei; they seem directed by neither the age of the child concerned nor by the prevailing mood of the utterance.

But it is possible to say that a surprisingly large number of such nuclei were found in this study of the English of kindergarten and primary school teachers.

I now propose to look at some of the places in which narrow nuclei were found. On several occasions, narrowness was found in passages invoking excitement. S1I affords examples:

but on | !! N this#, | mórning#p#. l m m1 |! she
 , wént#. | ! a, lóng#. a | !! N néw#, | pàth# m # l # m1 #

m = rhythmic

(S1I)

m1 = prosodic miming

and again:

m | Goldilocks# m# was p | verry cùrious# p# m = low
 | !! N so# she | !! did something# that per|hàps#
 she should |nót have, m done m# # m = low

l | she trîed# the |hàndle# of the
 |front.dôor# l# --- l p the |N dôor#

was un m2 |lôcked# q# l# p# - so she q = breathy

f |op f# èned'it# pp|N quietly# pp# m = rising

and l p |wént in# p# l# (S1I)

In this last passage the excitement is compounded by the use of narrow nuclei with features such as rise + fall marked with swoops and rise - fall and fall + rise nuclei, and the drawled syllable in |trîed#. The

climax is reached with $\frac{f}{\#} | opf \# \hat{e} n e n d \#$.

Almost each word in the following passage carries a narrow nucleus, and in combination with the rise-fall, fall-rise and compound nuclei, an excited atmosphere is created:

$\underline{m} \underline{f} | \hat{h} e \cdot f e l t \# . | \hat{v} e r y \# . | \hat{c} u r i o u s \# l l \#$
 $\underline{l} \text{ and he } | \underline{N} w \acute{e} n t \ \hat{u} p \# . \text{ the } | \underline{N} t \acute{e} n \# | \underline{N} s t \hat{a} i r s \# \underline{f} \#$
 $\text{.as } | \underline{N} q u i \hat{e} t l y \# \text{ as he } | \underline{N} c \acute{o} u l d \# \underline{l} \# \underline{m} \# \quad \underline{m} = \text{low}$

(S1I)

In evoking sadness, narrowness appears to play a large part. Good examples can be heard in K3II:

$h e | d i d n t \underline{N} k n o w \# \text{ what his } | m o t h e r \underline{N} l o o k e d$
 $' l i k e \# . \text{ he went. } \underline{m} \underline{q} | ! \text{ right } \underline{N} b y ' h e r \# \underline{q} \# \underline{m} \# \quad \underline{m} = \text{high}$
 $h e | \underline{N} d i d n t ' e v e n . \underline{N} s \acute{e} e ' h e r \# \quad \underline{q} = \text{breathy}$
 $\underline{m} \text{ he } | \text{ came to a } \underline{N} k i t t e n \# \underline{m} \# \quad \underline{m} = \text{high}$
 $\underline{m} | \text{ are you my } \underline{N} m o t h e r \# | \text{ he said to the } \quad \underline{m} = \text{high}$
 $\underline{N} k i t t e n \# \underline{m} \# - \underline{m} \text{ the } | \text{ kitten just } \underline{N} l o o k e d \# \quad \underline{m} = \text{low}$
 $n \underline{q} | \underline{N} l o o k e d \# \underline{q} \# . \text{ but didn't } | \text{ say a } \underline{N} t h i n g \# \underline{m} \#$

(K3II) $\underline{q} = \text{trem}$

Change in mood was heard when the baby bird begins to worry:

$\underline{q} \text{ I } | ! \text{ have to } \underline{N} f i n d ' m y \cdot m o t h e r \# \text{ he } | \underline{N} s a i d \# \underline{q} \# \quad \underline{q} = \text{trem.}$
 $\underline{b} u t | \text{ where } \# . | ! \text{ where is she } \# . | \text{ where } \# \text{ can}$
 $| \text{ she } ! ! \text{ be } \#$

(K3II)

- and the narrow nuclei give way to swooping movements and high and very high individual syllable pitch markers.

Narrows frequently occurred with high and lax markings - sometimes one or the other, and sometimes both features. This combination creates a singing wheedling effect that tempts one to label it 'cantabile':

and |! you think it Ndoesnt# - |NPhillipa# .

|!do you# _ a m1 m p m2 or |Nwerent# m = high

you |Nlistening# a# m1# m# p# pp |!! Nyes#

pp# m2# m1 = rhythmic

(S2) m2 = lax

This same singing tone can be seen in B2:

m |!!how many# have |I, got# m# _ |one# m = falling

_ m m1 |N two#_, |N three#m# m1# _ |four#m = very narrow

(B2) m1 = lax

or again:

.well m |!flap.our m# , wings# (B2) m = lax

In S1II this 'cantabile' tonality was used to indicate gentleness:

and a p m q m1 |little#pp# , pp |N bed#q# m = high

pp |Nwith# .a q2, |N green'quilt# m# q2# m1 = lax

m1# (S1I) q = breathy

Similar combinations were used to indicate sadness, as in:

m | he looked# m# m1 |! for Nher# m1# m = low
(K3II) m1 = lax

and:

so p a | Nway# m m1. | he Nwent# p# m# m1# m = low
(K3II) m1 = lax

and:

dim | Nnow# he | Ncame# to a m2 m | Ncow# m2 = lax
(K3II) m = high

S4 uses these features similarly:

p m |!poor . , Nsn^óow . , Nwhite# m# p# m = lax
(S4)

Frequently narrow nuclei were found either before or after normal nuclei moving in the same direction, as in :

p m |! what Nabout# | this# p# m# m = high
(S2)

Although here a pause separated the two falling nuclei, they were obviously intended to go together. On this occasion one feels that the narrow nucleus before the pause leads on to the next word, creating slight suspense before the most important information.

This type of patterning can be seen in all lessons examined. For example:

ac | theres a !cat# ac# ac, | N and# a
| duck# ac# (B1)

The drawl on the word "and" here serves the same purpose as the example above from S2. Narrow nuclei were also found leading to an ordinary one moving in the opposite direction:

the, | same size# . p|! as N the# p# m#
 |!| two · rod# (S3)

Here it is interesting to see that the important word becomes a complete contrast, losing its narrowness and acquiring a swoop.

This type of movement where the narrowness leads the children on, is very frequent. However the opposite can also occur, for example in the following passage, where the narrow movement is final - a coda-type phrase added to round off the utterance:

f|!| rolled right down# | that's N right # f
 (K4I)

An exaggeration of all types of nuclei (except, of course, level nuclei) was heard frequently among the teachers. This appears to be an attempt to underline the nuclear patterns of colloquial English in such a way that the children may copy and learn them. Children of the kindergarten and school age are still learning their language and it seems reasonable to

suppose that clarity on the part of the teacher will aid this process. The swooping found in the intonation of the teachers' English is a perhaps unconscious effort to make it easier for the child to copy the patterns of their language, and could be compared to the enormous printing teachers use ^{when} teaching a child to write.

The following table shows the distribution of the nuclei marked with this 'swoop' (=). 16.72% of the nuclei in the corpus carried this marking.

	\diagup	\diagup_N	\diagdown	\diagdown_N	\wedge	\wedge_N	\vee	$/ \backslash$	$/_N \backslash$	$\backslash /$	$\backslash_N /$	% of total number in each text
K1	2.4		6.3		1.6			0.8		0.8		11.9
K2	4.7	2.03	10.8				0.7	1.4		0.7		20.3
K3I	3.8		7.7					3.8	3.8		1.9	21.15
K3II	1.9	1.9	2.9					0.9		0.5		6.9
K4I	5.2	2.4	4.2	0.9	0.5			0.5	1.4	0.5		15.5
K4II	4.4	4.4	8.7									
B1	4.6	0.6	4.3		0.3		0.3	1.2		1.5		11.01
B2	3.7	0.3	9.8				0.9	0.3		0.9		15.9
S1I	6.9	0.2	11.9	0.2	1.4		0.8	2.8	0.2	0.9		24.9
S1II	11.2		14.2	0.5	0.5			1.5	0.5	2.5		30.9
S2	5.5		5.3			0.2		0.6		0.2		11.7
S3	5.4		8.7		0.4					0.4		14.9
S4	11.9	2.2	7.6	0.5	0.8		0.8	1.1	0.3	0.3		25.6
S5	1.4		3.4	0.3				0.3				5.4

Examples of this feature were found in every recording. Most frequently rises and falls were marked 'swoop', and those nuclei not marked narrow constituted the bulk of the total number of 599. It is important, though, that this exaggeration was heard with narrow nuclei as well.

One of the best examples of this swooping can be seen in the following list of articles from S2:

1 m |monkey# __ |mirror# __ |mushroom#
 __ |matches# __ |marble# __ |matchbox# __
 |mouse# 1 m# (S2) m = rhythmic

In the following extracts from S4, the emphasis intended by the teacher was audible from the first letter - the j in 'jealous' and m in 'mean' being held longer than is normal. To underline this effect, however, the nuclei were exaggerated:

!|jwhat# , does . |jealous' mean#
 (S4)

and

|what does it a# mean# (S4)

S5 also showed examples:

m |which ones# are |red' and q'white# q# m# m = falling
 (S5) q = creaky

and

|Ayreshire' ones# (S5)

S4 used this swoop to indicate finality:

and |came at# m |Nlast# m# . to a
|Nlittle# |red house# . (S4) m = high

A similar effect was created in K1

|put a bit of paste on it# |first#
(K1)

K1 also used the exaggerated nucleus to indicate surprise:

youve got |two# . (K1)

In many cases proper names carried this type of nucleus.

The movement seems important in catching the attention of the child being addressed:

a |whos going to live there# a# __
cr |Rosina# cr# (S4)

dim |what things# will you |want to
a# m continue with# to |Nmorrow# dim# m = lax
m# __ g |Rachel# g# g = breathy
(S5)

K2 used this feature to create tension:

that |Nvery# , |night# l# . in a
|Maxs Nroom# a# af|forest'grew#
f# ___ and l |grew# _ |!!N and#
|grew# (K2)

A combination of pitch change and the sudden dropping of narrowness combined to introduce an element of fear in the following example. The swoop on the important word emphasised the emotion carried in the lexical meaning of the word.

and m | they were m . | !frightened m = high
(K2)

Contrasts such as the one just mentioned are an important feature of this type of English. The teachers tend to use intonation patterns to attract and hold the children's attention. A.G. and E.H. Hughes in "Learning and Teaching" (2) wrote: "make use of the fact that children are naturally interested in something different, in something that contrasts with the background on which it is placed. Such contrasts can be obtained in many ways - by use of coloured chalks, underlining, italics, gestures or spoken emphasis. It should be noted also that emphasis on speech can be obtained in a variety of ways; by speaking loudly, emphatically, solemnly, slowly, softly and so on." In linguistic terms, the spoken emphasis can be introduced in many subtle ways - not only by means of intonation features.

The length of the tone units plays a significant

(2) "Learning and Teaching". Longmans, 1954, p.110.

part. In his study, Professor Quirk found that in about ten thousand words he counted 1880 tone units of an average length of 5.3 words. My research shows that in 8877 words, 3583 tone units occurred of an average length of 2.5 words. Thus, many short tone units were found in the teacher's English; this allowed for much variation and emphasis. The following table shows the average length of the tone units in each text.

	<u>Total number of words</u>	<u>Number of tone units</u>	<u>Average length of tone unit</u> words
K1	394	126	3.1
K2	336	145	2.3
K3I	140	52	2.7
K3II	619	201	3.1
K4I	557	213	2.6
K4II	132	46	2.9
B1	721	327	2.2
B2	861	327	2.6
S1I	1191	509	2.3
S1II	450	197	2.3
S2	1226	532	2.3
S3	547	242	2.3
S4	783	366	2.1
S5	820	295	2.8

The effect of these short tone units is strengthened by the small number of words generally occurring between the first stress in the tone unit and the tone unit's close (that is, between the markings | ___ #). About 76% of these stretches were only one or two words in length; 47.90% of the total number were only one word and 28.33% two words. 25.9% of the total number of words occurred before the first stressed syllable in a tone unit. The speakers differed in the proportion of words before the first stress and those after, but those following the stressed syllable accounted for between 68.85% and 95.00% of the total number. The following list shows the relevant figures for each speaker.

	<u>Total number of words</u>	<u>% of words after first stress in tone unit</u>
K1	394	78.7
K2	336	69.4
K3I	140	95.00
K3II	619	82.7
K4I	557	75.3
K4II	132	80.3
B1	721	81.6
B2	861	76.2
S1I	1191	68.9
S1II	450	78.00

Often this type of passage gave the impression of being one long tone unit with many stresses. The decision to divide them into shorter tone units was prompted by the fact that the emphasised words usually carried some nuclear movement. An example was found in K2:

and he |Nsailed off # a # _ , p | through
Nnights # and | , days # p # _ and
|Nin and out # of | weeks # _ and
| !!almost # | !!over a # | !!year #

(K2)

A similar effect is created by using subordinate tone units:

they |Nleft [the house #] # at | [half Npast #] Nnine #.
in |Ntwo 'straight lines # (K4)

and

in the | middle of [None #] Nnight #. (K4)

The subordinate tone units here appear to be partly an attempt to keep a constant rhythm throughout this rhyming story. This does not, however, change the effect of one long regularly emphasised tone unit.

The highest numbers of these subordinate tone units seem to be concentrated in read or told stories. The story in S4I (told) made use of twenty three subordinate

tone units. K4I (a read story) made use of thirteen. B2, the radio programme read from the script with little change, contained fifteen. B1 on the other hand was very much altered in the reading and only made use of eight subordinate tone units. Not all the story recordings contained a high number of subordinate tone units; K2, for example, only used three. The remaining eight recordings showed one, two or none. It does seem, then, that we cannot relate subject matter to subordinate tone units, other than to note that the two highest rates of occurrence were found in stories. It will be profitable, however, to show some of their uses.

S4 and S4I made use of subordinate tone units in the names of their respective story heroines:

S4 |Snów, [N_{white}#]# (S4)

S4I |Góldi, [l_{ocks}#]# (S4I)

S4I linked subordinate tone units with prosodic miming, in much the same way as did K4I in her rhyming story.

(S4I) m m1 |Góldi, [l_{ocks}#]# went |skíppíng, [ú_p#]#
to the |frónt [d_{oor}#]# of the

||:c_{ottage}# m# m1# m = rhythmic

(S4I) m1 = prosodic
miming

The speaker made good use of the rhythmic possibilities opened up by the subordinate tone units to imitate the action of the little girl skipping along a path.

S1I made use of two nuclei and a subordinate tone unit, where one would expect only one nucleus - over one word. For example : |meán, [tíme#]# and |middle, [nsized #]#

Similar treatment is given to words like "father bear": |fáther, [abear#]#, and |báby, [bear#]#. Once again, these provide a contrast and variety that combine to build up an interesting utterance that will hold the pupils' attention.

(11): PITCH

Pitch features on polysyllabic stretches will be discussed in terms of four features: high, low, falling and rising.

High:

The following table shows the number of occurrences marked high (including 'very high' markings).

	Number of Words in Stretch.												More	% of Total
	1	2	3	4	5	6	7	8	9	10	11	12		
K1			1							1				0.9
K2		4	2											2.7
K3I	1	1	3		1	1								3.2
K3II	1	2	5	4	6	1	1	2	2		1		1	11.8
K4I	4	1	2	1	1	1	1			1		1		5.9
K4II					1									0.5
B1	3	2		1										2.7
B2	4		1		1	1	1							3.6
S1I	14	4	1	3	5	3	2	4		1		1	3	18.6
S1II	1	2					1							1.8
S2	5	3	3	8	2	2	3	2	1	1		1		14.1
S3	7	3	5	3	2	1	2	1	1			1		11.8
S4	25	8	1	1	1				1				1	17.3
S5	1	3	2	1		2						1	1	5.0

It can be seen from this that most stretches marked high were only one word in length (30%). For those of 2,3,4 and 5 words, the distribution is fairly even although decreasing in number as increasing in length. (15%, 11.8%, 10%, 9.1% respectively) 75.95% of the total

number of stretches contained between one and five words.

Every recording shows some incidence of high stretches. Excluding the broadcast programmes, most of the lessons with low incidence are of the discussion type. (K1 and K4II). S1II, a mixture of a reading lesson and a discussion, contained only 4 stretches. S2, a reading lesson, and S3, a mathematics lesson, contained among the highest numbers of occurrences - 31 and 26 respectively. The stories provided most of the high stretches, however - S1I, S4, K4I, K3II.

Low:

	Number of Words in Stretch.												More	% of Total
	1	2	3	4	5	6	7	8	9	10	11	12		
K1	2		1		4									3.7
K2	1	3	1		1									3.1
K3I														.0
K3II		1	2	2	3	1	1			1				5.8
K4I	2					1	1		1	2				3.7
K4II		1		1										1.04
B1	5	1		1			2	3						6.3
B2	6	3	2		1	1		3						8.4
S1I	7	4	1	4	1		2	1		3	1		3	14.1
S1II	2	3	1	3		1	1						1	6.3
S2	6	3	6	5	5	2	4	1		2	1	1	1	19.4
S3	12	2	1	2	3	1		1					1	12.04
S4	3	4	1	1		2			1				1	6.8/contd.

S5	4	1	3	1	3	1	2	1						1	More	9.4
															Total	191

Low stretches occurred most frequently over stretches of one, two, three, four or five, words in length. Once again those of one word were dominant (26.2%) and there was little difference in the numbers of those of 2 to 5 words. (2 - 13.6%; 3 - 9.9%; 4 - 10.5%; 5 - 10.9%). School teachers seemed to use low passages much more frequently than did the kindergarten teachers, on the whole. The two broadcast programmes were between the two, tending if anything rather more towards the school teachers, whose low stretches made up 68.12% of the total. It was interesting to see that S2, a reading lesson - where the form of language is an important part of the lesson - contained the highest number of low passages (37) and was one of the biggest users of high stretches (31).

The speakers in S1I and K3I tended to act their stories, raising and lowering their voices as the story characters demanded. S1I, the story of Goldilocks and the Three Bears, provided good examples of this. Father bear, who spoke "in a big deep father voice", was almost always marked low; mother bear was pitched high, and baby bear spoke on a very high pitch - so high in fact, that at times the sound was

distorted on the recording.

and m |father .ˈbear# was . |looking#. m = low
 |forward# to his |porridge#l#. and he |went
 over# to his . |big Nplate# of |porridge# q |looked
q#__ and |Nsaid in# a f m1 |big#. |deep#. |voice# q = creaky
f# m1# m#__ m |Nsomebodys# been |tasting#, m1 = precise
 |my porridge# m#__ n m1 m |mother [ˈbear#]# came. m = very low
 |runningˈup# |Nbehind#, |him#. and m = rising
 she |Nlooked#. and |Nsaid# m1# m# m2 m1 = lax
 |someones# |been tasting# |my porridge# m2 = high
 |too m2#, fatherˈbear#__ |baby, [Nˈbear#]#
m |came Nrunning up# to his |little#
 |Nporridge plate# m#__ [squeaky q
 crying noises] and m |he q
Ncried# q# m# m1# |mummy q1 [mummy#]# m = high
q1#__ |somebodys#. |eaten# |my q = creaky
Nporridge#. f Nall , [Nip#]# m1# f# m1 = very high

(S1I) q1 = creaky

This type of pitch variation was also used to distinguish the characters even as they acted, not merely as they spoke. An example of this can be seen in the above extract:

and m |fatherˈbear# was . |looking#. m = low
 |forward# to his |porridge#

(S1I)

Even before father bear began to speak, the teacher's voice was low. This pitch "leitmotif" is most used with father bear but on occasions mother and baby bear are introduced in a similar way:

and q1 m |baby bear# |came Nin# and he m = high
 |still hadn't# . |stopped Ncrying# about his q1 = sob
 |porridge# . and he |cried Nagain#. |he Nsaid#
m# q1# (S1I)

The passage continued:

[crying noises] q m f |someones# been q = sob
 |sitting# on |my chair# m# . m1 and m = very high
 theyve |broken it# q# m1#f# m1 = high
 (S1I)

The speaker, telling her story with the aid of a flannel board and cardboard figures, kept the children's interest throughout almost without exception. While speaking she acted the parts as much as she could with her voice, and, at times, with her hands. Not the least of these efforts was the realistic crying noises, which were enclosed in square brackets in the transcriptions [thus]. In some cases it became rather difficult to describe the actual sound, but these labels, however inadequate should indicate the type of noise made.

A similar problem arose in K3II. Although this story was read, the teacher was obviously familiar with its form and acted the parts of the different animal characters as the plot unfolded. In one case it was practically impossible to record the sound made:

but the | big Nthing# | just Nsaid# q = husky
 m q m1 | [short]# q# m# m1# m1 = tense

(K3II) m = imitation

On the whole, however, change in voice pitch sufficed in the acting of the parts:

then he | Ncame# to a | Nhèn# m = high
 m are | you m1 my mother# he said to
 the m1# | hén# m# q# Nnò# said m1 = monot.
 the | Nhèn# l# m# m = low

(K3II)

An even greater variation was heard in the following passage:

then he | Ncame to a dòg# are
 m q | you my Nmother# he | said to the m = very high
 Ndòg# m# a# f l m | Im not# m = low
 your | mother# | Im a , Ndòg# . said the q = trem.
 q | Ndòg# q# m# f# l#.

(K3II)

In this case a combination of voice pitch and speed was used to distinguish the babybird and the dog.

In the following example a further feature was added.

dim | Nnow#he | Ncame# to a m2 m | Ncòw# m = high
m # m2 # dim # m1 are | you my Nmother# m1 # m2 = lax
 he m | said to the Ncòw# m # m1 = very high
m = high
1 m1 m | how could NI'be your 'mother # m = low
 | said the Ncòw# f q | Im# a | Ncòw# m1 = tense
q # m1 # 1 # m # f # (K3II) q = trem.

A hint of scorn was introduced by the ~~tension~~ tension in the teacher's voice, and, as well, further identified the cow as a character in the story.

These two stories invited such vocal dramatisation, but other stories were brought to life by similar means, although most were not as obvious.

For example in K4I:

m | Nin# they | Nwalked# and | then m = high
Nsaid# | N ah# | Nwhen# they | Nsaw# the
 | Ntoys# and | Ncandy# | and the Ndollshouse#
 . | fròm # | !! Npa, pà # m # (K4I)

By using a high pitched voice, the speaker conveyed the characters' excitement to the listeners. Similarly:

m and | she Nsaid# | !!please, Nchildren# m = high
 . | !! Ndò# . , | tell . 'me# m1 | what is Ntroubling
 [Nyóu#] # m # m1 # (K4I) m1 = rising

The character's anxiety was conveyed by the high voice. The 'story' children answered, again at a high pitch, but this time the pitch seemed to be straight character differentiation:

m | Nboò [Nhòò#]# _ | Nwè 'want # to | have
 Nour appendix# | Nout#. | Ntoò # m # m = high
 (K4I)

The passage continues:

m | good Nnight 'little girls# m# _ | ! thank
 the Nlord# | you are Nwell# _ and now m = low
 | Ngo 'to qsleep q##. said | Miss NClavell# _ q = breathy
 p m and she . | Nturned 'out' the light# _ and m = low
 dim | Nclosed 'the door# m#. (K4I)

The low pitch could be heard as indicating the vanishing of Miss Clavell's anxiety, but the change in pitch might also be another instance of character differentiation.

Pitch variation was used in K2 - to create atmosphere; for example:

(a) Suspense:

(and sailed ...) _ to mwhere the . | Nwild[^] things
 'are# m# (K2)

(b) Fear:

and m | they 'were# m# | !!fr[^]ightened# m = high
 (K2)

S4 contained little opportunity to act out the story characters, but the speaker made good use of its possibilities, although not able to carry a continuous "leitmotif" for each character e.g.:

|None day# . she a |looked into# , her a#
 |magic Nmirror# and |asked# m a |!!Nmirror#, m = rhythmic
 |Nmirror# a# _ |on' the# |wall# _ |who is the#
 m1 |Nfairest# m1# |None of# |all# m# _ m1 = high
 m2 |when# the |Nmirror# re|plied# . |snow . m = low
 white# m# p# _ the |queen# (S4)

Many of the high passages in this story however were parts of conversation with children:

m |Nyes# . Well |!! when'youre# m# . |!!jealous#
 a of |Nsomebody# . m = high

or

m |Nicola# m# (S4) m = high

RISING AND FALLING:

The following table shows the number of stretches of specific length marked rising in each text. It is interesting to see that with one exception (stretches of seven words), there is a gradual rise and fall in the number of occurrences after a peak at stretches of three words. S1I and S2 showed the highest incidence of rising stretches.

Rising	Number of Words												% of Total
	1	2	3	4	5	6	7	8	9	10	11	More	
K1					2								2.9
K2			1				1						2.9
K3I			1										1.5
K3II				2	2							1	7.01
K4I				2		1	1				1	1	8.9
K4II													
B1				1	2								4.5
B2		2	2	1									7.01
S1I	1	1	5	1	1	1		2	1			2	22.4
S1II			1										1.5
S2	1	4	3	5	1	2	2	1	1			1	31.3
S3				1									1.5
S4	1		1		1								4.5
S5	1		1										2.9
% of Total	5.9	10.4	22.4	14.02	13.4	5.9	5.9	4.5	2.9		1.5	7.5	

FALLING:

The following table shows the number and distribution of falling stretches :

	<u>Falling</u> Number of Words												of
	1	2	3	4	5	6	7	8	9	10	11	More	Total
K1							1						0.8
K2				1									0.8
K3I													
K3II			1	1			1		2	1		2	6.6
K4I			1					1					1.7
K4II													
B1		4	7	5	4	6	3	1	1	2		3	29.7
B2			4	4	5	8	1	2	1	8	1	1	35.00
S1I			2	1									2.5
S1II			1	1									1.7
S2			2	4	4	1	2	2	1	1		4	17.4
S3		1	1	1	1		1						4.1
S4				1		1						2	3.3
S5			1			1	1						2.5
% of Total		4.1	13.2	15.7	11.6	14.0	8.6	4.9	4.1	9.9	.8	9.9	88.7

As these tables show, in both rising and falling stretches, most frequently the stretches were between three and six words in length. Neither K3I nor K4II contained any falling stretches and only one rising stretch between them. Neither of them were part of the main lesson, the former being a preparatory rhyme and

the latter a concluding discussion. School teachers made most use of rising stretches, while the broadcasting speaker used falling stretches most. S2 used the same number of falling and rising stretches; B1 and K4 used three times as many rising stretches as falling ones. The broadcast programmes showed the greatest difference - falling stretches were nine times as frequent as rising ones. The remaining speakers made equal use of both types of stretch.

Rising and falling stretches were used in several ways. Questions frequently made use of rising and falling pitch:

does it m m1 m2 | start# the | same# m# m2# m1#
 (S2) m = rising
m1 = rhythmic
m2 = precise
 or

have m | you made a Christmas hat# m# - m = rising
 have m | you made a Christmas hat# m# m = rising
 (K1)

or

Does# m | !! that# start# _ the | same# m# m = high and
 (S2) falling

On one occasion, S4 used rising pitch over three sentences, each one word in length:

(What other feelings would she haveLee?)

Child: horrible feelings

Teacher: m | yes #

Child: angry

Teacher: | yes #

Child: tired

Teacher: | yes # m #

m = rising

(S4)

Rising stretches were also heard in passages creating tension:

and | N showed their # . | [N terrible #] m # claws # m = rising

(K2)

The addition of tenseness in the following example intensifies this feeling:

m the | wild N things # . m1 | roared their m = rising

N terrible roars # m1 # m # m1 = tense

The following passage from S1I uses a rising stretch in arousing excitement:

m2 m | there were three bears # . and she m2 = prosodic
miming

||! jumped out # of | baby bears bed # m # and m = high and
rising

she m | ran down # the | N stairs # a #

m = high

m1 aa | one two three four five six seven

m1 = rising

eight nine . m1 # ten # aa # m #

(S1I)

A similar effect was suggested in K3II:

but the , m | Nbaby'bird# | couldnt m = rising
Nget !!a, Nway# m#
 (K3II)

And as the passage continued parallel movement was seen; the rising panic of the baby bird, the upward movement of the "snort" and the increase in pitch of the teacher's voice all created an atmosphere of excitement and tension

the p | snort went m1 Nup# _ went
m1 | Nway [Nway#]#.
Nup# m# _ went m | up up Nup# m = high
 with the m# | baby Nbird# m1# p# m = rising
 (K3II) m1 = lax

A suggestion of prosodic miming was heard in the following passage:

1 cr | one# _ | two# _ | three# _ m1 | four# m = high
 _ | five# _ m | six# m# m1# (S1I) m1 = rising

The counting indicated the story character climbing up the stairs; but as the passage continued, the climbing pitch ceased and so could not support the marking "m = prosodic miming" :

_ , | seven# _ | eight# _ m2 | nine# m2# m = high
m | ten# 1# cr# m# (S1I) m2 = low

In K3II, however, a passage was heard where falling pitch could definitely be described as prosodic miming:

(the bird went) $\underline{m} \underline{1} | \underline{N} \underline{d} \underline{o} \underline{w} \underline{n} \# ., | \underline{d} \underline{o} \underline{w} \underline{n} \# ., | \underline{N} \underline{d} \underline{o} \underline{w} \underline{n} \#$
 $\underline{m} \# \underline{1} \#$ (K3II) \underline{m} = falling

The broadcast programmes, as has been mentioned already, showed highest incidence of falling stretches; their nearest rival was S2. This leads one to suspect that there may be a closer affinity between the school teachers and the broadcasting teacher than between the kindergartens and their broadcast counterpart. At first, falling stretches appeared to be a characteristic feature of this type of English, but closer examination revealed these to be concentrated in the language of the older teachers recorded. The younger teachers did not make much use of falling stretches, in comparison with B1, B2 and S2. This could, perhaps be a result of different training approaches. I have nothing to substantiate this statement, but the disparity between the teachers cannot be denied. The same trend is not noticeable in the use of rising features, however. Although S1I and S2 were the greatest users of rising stretches, the broadcasting speaker used no more than did, say, the student teacher in K3.

The broadcast lessons provided many examples of falling stretches. Falling pitch frequently accompanied

instructions, for example:

m |!come over# and |listen to it# m# m = falling
(B1)

Statements of fact carried this pitch movement:

m |!Im going to # |sing you the song #
about the |[brown#]. birds#. a |gain# m# m = falling
(B1)

or

you know m |Nmost #, |bud, Ngies # m = falling
.|ndont# |fly a[round#] #.
out |side# m# (B1)

It could, perhaps, be argued that the teacher in these broadcast programmes showed a tendency towards a falling in pitch that is not characteristic of this type of English. In passages like the following, the criticism might well stand:

m |wère going to have our # m #. |story now# m = falling
__ m |are you ready# to |listen# m# m = rising
_ were |having it# . |eāly # |this
mōrning# m |because its# |onè about #
a |train# m# __so m |come and# m = falling
|make yourselves# |comfortable# by
the|[radio]# m# m = falling
[story]
|thank you Michael# __|so# |!! nthat #
m, was |where# all the |animals# m = low

were | goìng # m # _ [and] they | díd #
m en | joy # them | sèlves # m # . aap | [dídn't m = falling
 they] # aa # p # _ _ l | lèts bè # . that
m | little Nred # | Ntrain # .) nòw # m # l # m = falling
 (B2)

Other teachers, however, showed a similar tendency,
 even though not as pronounced. S2, for example:
 well m | !well keep 'it 'up here # . and
 | well sèe 'if we 'can # de | cide Nabout m = falling
 'it # m1 | later # m1 # m # m1 = precise
 and
m a | wèll # well | Npùt 'them # | Nall m = falling
 Nback # in the | Nbòx # a # and | say
 'them # | a's 'were # | Nputting 'them #
m1 | bàck # m1 # m # m1 = precise
 (S2)

Almost all teachers did make use of contrasting
 rising and falling passages, however:
 cause m2 m | you can Nsèe # the | Ndòg # m2 = rhythmic
 on the | frònt # m2 # m # . m1 | can you # m1 = rising
m1 # _ | [ə:m] # m m1 | what do you m = falling
 Nthink # the | Ndògs # . | dòing # m # m1 # m2 = rhythmic
 (S2) m = falling

m | wait# for the | whistle# m #_ and m = rising
 then . m | !off we go# m # m = falling
 or (B1)
m a | !!lets have a song# a# m # about m = falling
m | some of those Manimals# m # m = rising
 (B1)

| None# , m | nice Norning# | Miss m = narrow and
NClavell# | Nsaid# m #_ m | !!isnt this rising
 a fīne [day #]# to visit | Madeline# m # m = falling
 (K4)

Pitch range too, then provided some of the variety and contrast that appear to play a large part in the teachers' language. Further emphasis and contrasts were provided by the individual syllable pitch markers. In this study only three of these were heard:

- !! - extra high booster
- ! - high booster
- , - drop.

The following table demonstrates the distribution of these markers throughout the texts. These numbers are not percentages.

	!!	!	,
K1	4	5	6
K2	18	4	37
K3I	3	0	3
K3II	20	14	27
K4I	20	11	22
K4II	2	1	7
B1	25	18	23
B2	22	40	61
S1I	27	13	43
S1II	5	10	15
S2	46	26	35
S3	8	11	16
S4	18	13	42
S5	11	9	21
Total	229	175	358

Of these, many occurred at the beginning of a tone unit:

<u>Marker</u>	<u>% at the beginning of a tone unit.</u>
!!	93.49 %
!	86.83 %
,	48.32 %

It is interesting to see the wide disparity among these percentages -- high and very high markers occurred almost twice as often at the beginning of tone units than did the drop.

On several occasions !! and ! were found at the head of falling stretches; for example:

m1 | !!how will# we | find out# m1#. m1 = falling
a m | !! Nlets# | have a Nlook# at the
Nnext page# and | see if he does# a# m# m = falling
(S2)

The following table gives an indication of the frequency with which this type of pitch feature occurs:

	<u>!! + falling</u>	<u>! + falling</u>	<u>. + falling</u>
Kindergartens	5	1	1
Broadcasts	13	16	0
Schools	6	2	0

These numbers are not large, but when one takes into account the number of markers followed by a falling or a narrow falling nucleus, more faithful a picture of the situation is obtained. Of the extra high and high boosters only 17.7% were not followed by one of these falling nuclei. There are, of course, many

examples:

|!up and down like 'this# p #
|!oh # (K1)

but. |!Max# m a |!stepped# into
his |!private# |Nboat# m # a # m = rhythmic
(K2)

|!everything in 'it # was, |small #

and

you know |!more Nabout 'it # than
|I 'do # aa # (S4)

dyou m |!know what Nmachine #.
What the |!part of the Nmachine m = high
'is# that |!Rachels m # talking
'about# (S5)

Comparable with this type of movement is the tendency
to follow extra high and high boosters with a drop as
in :

m p a |! and, made 'him#. |!king# m = rhythmic
(K2)

|!oh., oh a, said the mother a Nbird #
(K3II)

a I |!think, you# re |member #
(B1)

|!and, thats# !the |finish# p# a #
(S2)

These changes could be heard even within single words:

|couldnt Nget !a , Nway# (K3II)
 |!peo , ple#
 |!! Mi , chael # (B2)

Some of the strongest contrasts occurred with juxtaposition of high and low individual syllable pitch markers. In K4I a very clear example of this was heard:

m !and , | Nbroke !Ntheir# , | Nbread# . m = rhythmic
 ! and , | brushed !their# | Nteeth #
 ! and , | went# |!! Nto # m# _ |bed#
 (K4I)

This use was not restricted to any one type of teacher:

|!!Ill# | Neat# , you |!!Nup # (K2)

and

where |!he , found# his |!!supper
 'waiting 'for 'him# (K2)

and

q I q p |!!think , hickety . 'pickety# q = creaky
 |!!Nmay , Nhave# , |laid one there#
p _ a |!ooh, she !!has # a# _ m m = rhythmic
 shes .|!laid# , an |egg# , on
 |Nmay # , |chair# m# (B2)

(iii) TEMPO

Tempo features will be discussed as a system of six terms which seem very close to the tempo marks found in music:

allegro (a)	meaning fast
allegro ss issimo (aa)	meaning very fast
lento (l)	meaning slow
lentissimo (ll)	meaning very slow
accelerando (ac)	meaning increasing in speed
rallentando (ral)	meaning decreasing in speed

The following tables show the number of occurrences of each term and indicate the length of the stretches involved. Those texts omitted in any table showed no incidence of the tempo feature concerned.

<u>a</u>	Number of Words													% of Total Number
	1	2	3	4	5	6	7	8	9	10	11	12	More	
K1		1	1		1				1					1.8
K2		3		1	1			1						2.8
K3I					1								1	0.9
K3II		1	1	1	1	2	2	1						4.1
K4I			1			1	1						1	1.8
K4II									1				1	0.9
B1	2	1	2	4	1	1	2	2	1					7.8
B2	1	2	6	4	2	2	2		1	1		2	4	12.4
S1I			1	1				1		1				1.8
S1II					1				1					0.9
S2	3	4	3	6	6	3	7	1	2	3	1	2	3	20.2
S3	1	8	3	7	5	5	4	6	2		1			19.3
S4	3	8	4	3	3	3	1	2				1	2	13.8
S5		2	7	5	1	1	2	2		1	1	1	3	11.9

The average number of occurrences in the kindergarten teachers was 5.16 ; the average in the broadcast programmes was 21.5 occurrences, and among the school teachers 24.6.

<u>aa</u>	Number of Words												% of
	1	2	3	4	5	6	7	8	9	10	11	More	Total
K1		1											2.9
K3I			1							1	1		8.6
K3II					1			1			1		8.6
B1		5		2	1	1			1		1		31.4
B2		2	1										8.6
S1II										1			2.9
S2		1			1							1	8.6
S3			3			1							11.4
S4	1		1					1	1				11.4
S5		1										1	5.7

The average number of occurrences for the kindergarten teachers was 1.16, for the school teachers 2.3 and for the broadcast programmes 7.

<u>1</u>	Number of Words											% of	
	1	2	3	4	5	6	7	8	9	10	11	More	Total
K1		3		1			1						3.4
K2	1	2	2		1								4.1
K3I						1							0.7
K3II			4	1						1		1	4.8
K4I			2	3	2	1			1				6.2
K4II		2	1										2.1
B1			3	1	1		1						4.1
B2		1		3	1							1	4.1
S1I	2	6	3	3	3	3	1	2	1	2	2	4	21.9
S1II	3		2	3	2								6.8
S2		2	6	2	2	1	2	1		3			13.01
S3		5	3	1	1	3		1			1		10.3
S4	1	2	2	2	5		1	3	2		1	1	13.7
S5	1	1	3		1					1			4.8

The average number of occurrences in kindergarten teachers was 5.16, in the school teachers 17.16, and 6 in the broadcast programmes.

<u>ll</u>	Number of Words								% of
	1	2	3	4	5	6	7	8	Total
S1I								1	14.3
S1II	1					1			28.6
S2				1		1			28.6
S4							1		14.3
S5		1							14.3

<u>ac</u>	Number of Words									Total
	1	2	3	4	5	6	7	8	9	
B1			2							28.6
B2								1		14.3
S2									1	14.3
S3							1			14.3
S4						1				14.3
S5					1					14.3

<u>ral.</u>	Number of Words										Total
	1	2	3	4	5	6	7	8	9	10	
B1					1					1	66.6
S1II					1						33.3

It is interesting to see that throughout, the school teachers and the broadcast speaker made more use of every type of tempo marking than did the kindergarten teachers. The kindergarten teachers, however, made equal use of a and l tempo markings. It should be mentioned here, that the school teachers and the radio speaker, in general spoke more slowly than did the kindergarten teachers, thus allowing themselves more scope to increase in speed and less to decrease.

Most fast tempo markings were found in S2 and S3, the two real 'lessons' recorded. Slow markings were found most in the stories. All speakers made use of contrasting tempi, however, though some more than others. Frequently a teacher made sounds of approval at a fast tempo, while otherwise speaking relatively slowly:

l |very Ngood# l# __ |stick it on#
 ___ aa |!thats right# aa#

(K1)

There was also a tendency to turn a statement into a question with the addition of a quick "didn't they" or

"aren't they". These added questions more often than not carried a rise-fall or rise + fall nucleus.

For example:

[and] they |díd#m en|jòy# m = falling
 them/sèlves#m# . aa p |[dídnt thèy]# aa#p#

or

a m |!!Nthèyd' just # , | fall'off# a #
 aa |wòuldnt' they# aa# m# m = high
 (S5)

A similar trend was found with the short sentences, added to the main statement, which contributed little to the main sense of the utterance:

a |what Ncòlour# is a |thrèe'rod
 'going to be# a # . aa |!have a think# aa#
 (S3)

Tempo was used frequently with prosodic miming. One of the best examples is this passage from S111:

she a |Nsát, [úp#]# m#__ m1 | thought she m = high
 was having a dréam# m1#_ m2 m |there were m1 = high +
 thrée bears# . and she |!!jumped'out# of m2 = rising
 |baby' bears béd# m#_ and she m = prosodic
m1 |ràndown# the |Nstairs# a# m1 aa m1 = high
m1 = rising

|one two three four five six seven eight
 nine . m1# tén# aa#m# _ a and ral m
 |Nopened# the |cottage Ndoor#m# _ m = high
 and |ran 'down #the |garden Npath#
 _|!!through 'the woods# a# . and she |didnt#
 . q |stop q# . runn^uing# . until . l |Nshe# . q = creaky
 got |Nhome# . to her . |mother#ral#m2# .

(S1I)

The passage sounded most effective and was really part of the 'play' character of the whole story. The fact that in speaking faster one tends to use longer tone units than normal is borne out by the speaker in S1. For example, instead of |baby bears béd#, we have come to expect the teacher to say |baby bears#|béd#, as we find |Ngréat big#|béd# and |Ntiny littl^e# |baby chair#. (S1II) Similarly, the stairs climbed above from one to ten in a single tone/unit have already been climbed more slowly in ten tone units:

one# _ two# _ three# _ m1	m1 = rising
four# _ five# _ m Nsix# m# m1#	m = high
_, seven# _ eight# _ m2 Nnine#	m2 = slow
m2# _ m tén# m#	m = high

(S1II)

Prosodic miming with tempo markings ^{was} ~~were~~ found in other recordings, as well. For example, B2 where contrasts in mood are supported by contrasting tempi:

m | Nthat's#m# a | [lovely#] . happy 'dance#_ m = high
a well |!have it a,gain# a# _ | Nand# |!this,
time# . | Ndance# with your | arms# _ | and
your Nfingers# ., a and your | Nhead#
a# _ as | well as# | your feet# _ _ | Ndance#
with your |!whole, self# _ _ |!off you, Ngo#
[music]

| that was m happy 'dancing #m# _ _ m = low
m | this, time# | well have a l m1 Nsād, m = prosodic
Ndance# _ | well have some Nsād# m1 = low
| dāncing [music#]# m1# _ _ | its
Ngoing# to | make Nyōur feet#
|!feel Nsād# _ , and | your : Nhead#
_ | ānd your, Narms#. | āll, Nsād# and
, | d̄roopy# m# l# _ _ p | heres the
Nsād mūsic# p#

[music] m = prosodic
m2 | Noh# m l that was., m1 | Nvery m2 = lax
'ead# m1# m2# l# m1 = very narrow

(B2)

The following example demonstrates a further use of contrasting tempi:

aa so that m | Nmummy # can m = falling
 | Nput 'it' into # the | Noven #
m # aa # --- 1 | and 'if
 'you're # | !! very [good #] # 1 # (B2)

This type of tempo change is often heard in adult conversation with children. The slow 'if - clause' is half-threat - half-promise, and the effect is altered accordingly. The swift command in the passage below, on the other hand, jolted the listener into awareness - and obedience!

ral and | then we can Nmake # a
 | cup of tea [tòò #] # ral # -- a | !stand
 up # a # (B2)

Similarly:

and | !![~]now # Im | going 'to look #
 be | hind 'my #. | chair # -- aa | come 'on # aa #
1 | you, m look # be | hind # | 'your #, | chair #
m # 1 # (B1) m = falling

By using lento tempo marking and rise-fall and fall-rise below nuclei, the speaker/changed the tone of her utterance;

a sense of security became a dark premonition of trouble:

that a p |before#you could |Ncount'to [Ntèn#]#
 .she |Nfèll# |fāst asleep# a# p#___ l |in#the
 |mean, [time#]#_ the |ôwners# of the |hóuse#
 |Ncāme# |hōme# l# (S1I)

S2 emphasized the important part of her reading lesson - the words actually read from the book - by speaking at a slower pace. This presumably allowed the children to follow the words as she said them. Sometimes the tempo was slowed down by pauses, and at other times the markings l or ll were added. On several occasions, the speaker used both together:

m ll |hēre# _ |iŝ# _ |Būch# ll# _ m = precise
ll |NButch# _ m1, |Nis# m1# _ m2 |on# _ m1 = low
 |,ā# m2# _ |!!fārm# ll# _ |yōu . 'were# m2 = rising
 |!!right#, |Jāne# (S2)

The words spoken at normal speed provided sharp contrast to this sort of passage. The passages read from the book, however, were not always marked slow. For example, after a discussion about whether the dog liked to dig or not, the teacher read:

m1 a |Búch# ., |Nlíkes# to |díg# a# _ |Búch# . ,
m |díg# _ p in the |Ngárdén# m# p# m1 = precise
(62) m = low

The information not previously discussed was spoken at a slower rate than the material already familiar. The pause before the last tone unit draws attention to these new words. The following extract from the same lesson clearly showed the emphasis placed on the slower stretch by the change in speed.

m a f |Nríght# |lets read·it# because m = low
|Ntháts# what the |farmer said# m# a# f# m1 = precise
m l m1 |Ngóod# _ , |Ndog# _ m = low
|Búch# m# l# m1# _ _ p a |!and,
tháts# !the |finísh# p# a# (S2)

Throughout these recordings constant juxtaposition of contrasting tempi was noticeable - particularly with the school and broadcasting teachers. As far as the radio programmes were concerned, the variations seemed to provide a necessary and effective way of holding the attention of an invisible class that has only aural contact with their teacher. In the schools, the changes seemed to play a part in the actual process of teaching, as well as being a means of providing interest.

One final feature must be mentioned in this section on tempo. This is the use of drawled syllables (marked = above the syllable centre). A total of 246 drawled syllables were recorded, 81.5 % of which were nuclear. The use of these drawled syllables was varied, but one of the most consistent was the use of a drawled syllable before a pause - this will be discussed more fully in the section on pauses.

Drawled syllables occurred most frequently in K4I (37) and S3 (34). These two teachers were necessarily different in their approach - one was with a kindergarten class to whom a story must be read, the other was taking a school mathematics lesson. This does indicate that the use of these long syllables is restricted neither by the age of the pupil nor by the subject being taught. While the schools' average was 16.5 occurrences and the kindergartens' 12.16, the broadcast programmes had an average of 20. This shows only slight variation, and it may safely be assumed that the use of drawled syllables is fairly general among teachers of the three to seven year olds.

Drawled syllables were frequently used to emphasise a seemingly important word:

p m |n^ow#p# m#. m a can |N^you tell me# m = low
 a a |litt^le N^st^ory# a |b^out what weve got ther^e#m#
 (S3) m = high

An irregular beat in the following passage lent emphasis in a different way; the child's attention seems drawn away from the things he has just been working with and directed towards his next actions:

I |w^onder#. if, p |N^you can#. |tak^e these#.
 |a^ll up to your# |tab^le# p# ___ and I a
 |N^want you# to |g^o to the#, |blac^kboard# a#. .
 the |ch^alk# is |N^over ther^e) a where it is#
 in the |big b^ox# a# (S3)

S2 used drawled syllables for emphasis in a similar way to the first example above:

but I l |N^want things that start# m# the m = low
 . |s^ame as# . |moth^er# (S2)

and S5. too

|N^well# it . |th^at wouldnt stop# the m |c^ow# m = lax
 m |givⁱng milk# a |w^ould it# a# _ but the
 |wh^ole thing wouldnt work# (S5)

On other occasions drawled syllables seemed to create excitement, as in K2, for example

m | Nhis mother# | Ncalled him# m#
| wild Nthing# (K2) m = low

and again, this time with a touch of surprise:

a f | forest 'grew# f# ___ and . l | grew#
___ | !!N and# . | grew# l# (K2)

In S1I the drawled syllable introduced a secretive aspect to the suspense:

she | !!did something# that per | haps#
she should | not 'have m done# m# m = low
l | she tried# the | handle# of the
| front. door# l# (S1I)

and

and he | went into# the | living room#
___ and l | saw# (S1I)

In a few cases these drawled syllables were apparently allowed to convey at least a little emotion.

In S2, for example, a threatening atmosphere was introduced:

| !sit up 'please# | Sarah# a# . | and#
, | Nigel# ___ | right# (S2)

Shock and anxiety were suggested in S4:

|but the Napple# was |p^oi^soned #

(S4)

Incredulity was indicated in the following example:

ll |and the !mirror#. m |Nstill# m # m = high
 , |Nsaid# _ |Sn^ow#, |Whⁱte# ll # _ l the
 |queen' was #. |s^o #, |aⁿgry#. she.
 |br^oke the mirr^ors# l # (S4)

Perhaps to keep the rhythm of her rhyming story, K4 made great use of the drawled syllable, as in the following passage:

|all about NMadeline# _ in an |Nold
 'house# in |NParis#. that was |Nc^overed
 'with [Nvines#] # _ lived a m |!!tw^elve little
 Ngirls#. in |Ntw^o'straight lines# m # m = high
 a# _ in |Ntw^o straight lines#. they.
 |Nbr^oke 'their [Nb^read#] # and |br^ushed
 . 'their# |Nt^eeth# |Nand# _ l, |w^ent 'to
 !!bed# l # _ (K4)

Such constant use ^{as} of this was not usual, however, even with this teacher. Most speakers used these drawled syllables a good deal, but not so much as to produce any monotony. In most cases they were used

to good purpose - varying the utterance and emphasising its important parts.

(iv) PROMINENCE:

This system is discussed in terms of six features:

Piano - p	-	soft
Pianissimo - pp	-	very soft
Forte - f	-	loud
Fortissimo - ff	-	very loud
Diminuendo - dim	-	becoming softer
Crescendo - cr	-	becoming louder

As are all features discussed in this study, the prominence markings are relative to the norm of the speakers concerned. In the following tables, those recordings which show no occurrence of the specified feature are omitted.

The following table shows the number and distribution of loud stretches:

<u>f</u>	Number of Words													% of	
	1	2	3	4	5	6	7	8	9	10	11	12	More	Total	
K1										1			1	3.7	
K2	2	3		1	1									12.9	
K3I			2		1					1				7.4	
K3II			2			1								5.5	
K4I		1			1								1	5.5	
S1I	5	1	1	2			1			1		1		22.2	
S1II	2													3.7	
S2	2	3		2	2				1	1		1		22.2	
S3	1	1		1		1								7.4	
S4	1													1.9	
S5	2		1	1										7.4	

With a total of only 54, it seems that forte stretches do not play a large part in this type of English. The broadcast speaker found no use for it at all. Fortissimo was very rarely used; only one stretch was marked very loud and that was over only one word (S4).

In comparison with these results piano stretches were found relatively frequently (192 occurrences in all). The following table indicates the number of piano stretches and their distribution:

P	Number of Words													% of	
	1	2	3	4	5	6	7	8	9	10	11	12	More	Total	
K1	1		1		1		1							2.1	
K2	1	3		2				1						3.6	
K3I		1	2										2	2.6	
K3II			4										3	3.6	
K4I				1	1			1	1	2		3		4.7	
K4II		3		1										2.1	
B1	1	2	1	1	1	2		1					1	5.2	
B2		3	5	1		3	1	2	2	1	1		1	10.4	
S1I	3	4	2	4	1	1	1	1	1	3	1		2	12.5	
S1II	3	2	1	1		1		1	1		1			5.7	
S2	6	3	6	6	6	4	1	2	1	1		3	1	20.8	
S3	8	4	4	3	4	3		3	1				1	16.2	
S4	3	2	4	1	1	1			1					6.8	
S5	1				3	2				1				3.6	

A corresponding increase can be seen in pp stretches:

	Number of Words		
	1	2	Total
B1	1	1	2
S1I	1	1	2
S2	2	1	3
S3	1		1

It seems, then, that while teaching, a quiet voice has a more appropriate effect than does a loud one.

On many occasions, however, the loud stretches were used to control that part of the class not under direct supervision. For example:

and |!!NÍ#|think that's all I have#
 __ f l m |I can hear#. |NRichards#. m = tense
 |voice#. and I do m1 |not want . to hear m1 = precise
 it#m1# f#m#l# (S2)

In this case the speaker was teaching a small group of children. 'Richard' was one member of the rest of the class.

Although the broadcast speaker used no loud stretches, she was among the greatest users of piano stretches. With no class before her, perhaps the need to raise her voice did not arise. The quiet stretches, however, seemed to be a means of contact with the children. The following passage, for example, creates an intimacy that suggests to the child that the teacher is a person and not simply a radio voice:

m |you ., crawl under#m# the |table# m = falling
 _ and m p |!!see if you can find an q = creaky
 q egg [there#]# q#m#p# m = falling

(B2)

The following example shows another use of the piano marking to link speaker and hearer. The quiet stretch refers to something both have in common:

a he has a |little# , |bell# to, |ring#
_ p |like Benny# p# (B2)

The two school classes of new entrants showed the highest incidence of forte stretches, and were also among the highest in piano stretches. This suggests that they have made use of contrasts in prominence, as heard in the following example:

and |she knew# p# |lots of# , the p m m=low
 |little, paths# _ and q |Nexciting q=breathy
 ways# to |go in the woods# m#
q# p# _ f but on |!!Nthis# , |morning# f#
 (S1I)

The following passage from the same recording shows good use of forte as an element of surprise:

l |she tried# the |handle# of the
 |front . door# l# --- l p the |Ndoor# q = breathy
 was un q m |locked# q# m# l# p# _ so m = rising
 she |f op f# ened it# pp |Nquietly#
pp and l p |went in# p# l# (S1I)

In S2, soft and loud were used to indicate the way in which the children should answer the teacher's question. The correct answer is marked fast and loud, the wrong one, quiet and low.

Teacher: m a f | who Nthinks#it | does#a#f# m# m=rhythmic

Child: me

Teacher: m p | who thinks#it | doesn't#m# p# m = low

(S2)

On one occasion this same speaker asked a question quietly, addressing it to the group in general. Repetition of this question, however, was forte and directed to one pupil specifically:

p m |!!what do you m# Nthink#he m = monot

|said#p# . or m what do cr#f

|Nyou [Nsay#]# to |N your# ,

|do#m# f# when you |Nfeed m = high

°him# _ |Ja#ne#

(S2)

In many cases it became rather difficult to distinguish what was in fact a change in prominence, and what was only the teacher turning her head away from the microphone. This problem did not, of course, arise with the broadcast lessons. The constant movement of the teacher was especially noticeable in the

kindergartens, K1 being one of the most difficult. The school recordings presented a similar though smaller problem in comparison.

The kindergarten teachers made relatively infrequent use of piano and forte stretches. K2, however, tended to emphasise the beginning of words or phrases with a syllable or syllables marked forte:

and |Ntamed , Nthem#. with a f dim
|Nmagic f# trick# dim# (K2)

and

he , |Nsmelled#. m f dim |Ngood# |things# m = tense
m#f#dim# to |eat# (K2)

The trend was continued in some words where only the initial letters were emphasised:

|someone# |loved . him#. |Nbest'of "all#
(K2)

This interesting feature was not easy to mark, as often the initial accentuation was not strong enough to warrant marking as either a stressed or a forte syllable.

Not a great deal of use was made of the features "dim" and "cr". The following tables show their distribution:

[illegible][illegible]

There is little to be said about these two features. Their small numbers do not warrant much discussion, other than to mention that ~~its~~^{their} seeming unpopularity among teachers may be related to the necessity of providing sharp contrasts when speaking to children.

It seems useful here to examine the combinations of speed and prominence features found in these recordings. The following table shows the number of each combination found:

Number of Words											Total
	1	2	3	4	5	6	7	8	9	10	
a + p	5	5	6	4	3	3	1	1	1	1	30
l + p	2	5	5	2	3				1	1	19
aa + p		2	2		2						6
l + dim	1			1	1						3
a + f	1			1							2
a + dim		1			1						2
l + f			1			1					2
l + cr	1		1								2
ll + p		1									1

The two combinations worthy of note are a + p and l + p. An interesting point is the preference for fast rather

than slow stretches with piano markings. It does perhaps add to the sense of intimacy to speak quickly as well as quietly, as in:

a p [I] | think 'some' of 'you' #
 | know # | that rhyme # __ m | :you m = falling
 see 'if' you 'can' # | say 'it' # | with
 'me' # m # p # a # (B2)

and similarly:

| try it a, gain # a # _ | come back Peter #
 _ m p a | hes not Nthere # wheres he m # m = high
 | gone # _ can m | you 'see' him # m # ___ m = high

[Children: No]

Teacher: | try Nagain # _ | say it loudly # p # a #
 (K3I)

S3 however used p and a stretches when talking to one of the small group being taught:

a p m which | one do you need #. | Paul # a # p # m # m = low
 and (S3)

a p | what one have you got # | have a think # a # p #
 S3)

Her use of this combination was not restricted to this type of utterance, however:

p | right # . a | !put those 'all' away # p # a #
 (S3)

K1, too used these p + a stretches when speaking to one child out of a small group:

P, m a see if | thatll q Ngo'on# q# a# m# p# m = low
(K1) q = creaky

K3I used similar features when talking to one of the lost 'birds' - a piece of plasticine used to represent the bird sitting on the wall, in the rhyme.

f | come' back !!Peter# f# n
m | Nthere' he is# m# p aa | Ngosh m = low
'Im' glad [you] 'came' back# (K3I)

The combination was carried on, however, and the intimacy was transferred to the children as she addressed them.

- | lets try it again# p# aa# (K3I)

The examples of lento with piano are too diverse in effect and intention to be categorized here. They seem to be a matter of personal preference in most cases, as indeed do the bulk of the prominence-tempo combinations. Only the intimacy and security suggested by stretches marked allegro and piano seem important and consistent enough to warrant mention.

<u>Tense</u>	Number of Words													of	
	1	2	3	4	5	6	7	8	9	10	11	12	More	Total	
K2	2	1		1										19.04	
K3II	2				1							1		19.04	
K4									1					4.8	
B2	2													9.5	
S1I								1					1	9.5	
S1II	1													4.8	
S2					1								2	14.3	
S3					1									4.8	
S4			1											4.8	
S5		1			1									9.5	

Neither of these features was used overmuch, but when they did occur it was, for the most part, to definite purpose.

Tense. Of the twenty one instances heard, ten were used by the school teachers. In three of the kindergarten recordings, a total of nine tense stretches were heard. The remaining two tense markings occurred in one broadcast programme. It is significant that the two recordings with the highest incidence were from kindergartens (K2 and K3II) and both were stories.

Tenseness was used in several ways.

In K2, for example, the feature played a part in expressing fear, as in:

m1 | Nro^lled m1# 'their# | Nter^rrible e^yes# m = tense
and

and | called# | him# . the most . m | Nwild
m#thing# . l of . | all# m = tense
(K2)

In K3II the feature was part of the suspense created, for example:

m / Ndown 'out' of 'the 'tree# m# m = tense
(he went) (K3 II)

S4 used tenseness for the same effect:

m m1 | Ntake 'Snow White# m1# | Ninto 'the m = low
forest# m1 = tense
(S4)

Scorn was introduced in the following examples:

could | that 'old 'thing 'be 'his 'mother #
m | Nno # m # (K3II) m = tense

and

m2 f | she # was | not Nafraid 'of #
 | Nnice # | she Nloved . [Nwinter #] # m2 # m2 = tense
 (K4)

Tense stretches were also used to intimate a threat:

| oh 'it # . m1 | !without # m1 # a | looking
 at the Nblackboard # (S5) m1 = tense

and

when m2 m l m1 | NSarah # is m = falling
 | Nsitting 'up # m # cr | Nnicely # l # cr # m2 = tense
m1 # m2 # (S2) m1 = low

and

m m2 l | [ə:] # . | Njust # . a, | moment
 Richard # . we m1 | are trying to Ndo # , m1 = falling
 | our . reading # m1 # m2 # | you . have . m = tense
 | Nplenty # to | do # . m3 you m4 m3 = rhythmic
 | know what to Ndo # . when youve m4 # precise
 | finished # m # m3 # m4 # l # (S2)

"Tense" was found marked in B1 on two occasions, and both of these were on the word 'yes'. Their significance can best be demonstrated by quoting the words in

their contexts.

m |you , crawl·under#m the |table# and m = falling
m p |!see if you can find an gegg [there#m = falling
q#m p# q = creaky
 [music]
m |yes#m . |Nive founda pre l m = tense
 |Ntend [Negg#]#l under |! my, table#

The second example is similar:

l |you , m look#be |Nhind# |your# , m = falling
 |chair#m l# _ p m and |see if you m = falling
 can find#m an |other# . of m |Hickety
 Picketys eggs#p m# m = falling
 [music]
m |yes#m theres an dim m |!other Negg# m = tense
 be |hind the q chair#q dim#m m = falling
 rhythmic
q = breathy

This use of tenseness was found in no other recording.

Perhaps the nearest approach was this, heard in S1II:

and |pick Nout# |one more Nstory#
 _ |there#m m# _ m1 [J] m1# . Ill |!tell m = lax
 you what# (S1II) m1 = tense

However, since the feature was not in any other recording, it must be regarded as an individual characteristic.

Lax. Lax was most frequently found in conjunction with high and narrow markings, in a combination that is best described by the musical term "contabile". It is perhaps not one of the most frequent features of the teachers' English but is definitely distinctive. The following are some obvious examples:

and |;you think it Ndoesnt# _ |NPhillipa#. m = lax
 |!do you# _ q m1 m p m2 or |Nwerent# m1 = rhythmic
 you, |Nlistening# a# m1# m# p# _ pp m2 = high
 |!yes# pp# m2# (S2)

m |!if you Ndie# _ m2 do you a m1 m1 = monot
 |ever come a Nlive# a# a |gain# m# m1# m = high
m2# (S4) m2 = lax

These two examples show that the characteristic effect is gained by combining several features: lax, high and narrow. Lax must always be present, although one of the latter features may be omitted, without losing the recognisable soothing tone of this combination. More often than not, however, all three markings are present.

Lax was also used in other ways; a suggestion of sadness was introduced in S4:

and the m l |tears ran# |down their#,
 |faces# l# m# (S4) m = lax

A similar feeling was felt in B2:

m2 | Noh#. m 1 that was . , m1 | Nvery sad# m = prosodic
miming
m1#m2# 1# (B2) m1 = very narrow
m2 = lax

In S11, 'mother bear' was almost always characterised with a lax marking:

m | there' there# | baby bear# _ | I'll 'make# m = lax
| Nyòu 'some more# m# (S1I)

Precise. Almost all the speakers seemed to take considerable care over their enunciation. This was particularly noticeable in those stretches marked precise. Significantly, there were no slurred stretches. The following table shows the number of precise stretches heard.

	Number of Words										% of Total
	1	2	3	4	5	6	7	8	9	More	
K2	1		4								8.3
B2			1								1.6
S1I	1		1	1							5.00
S2	11	3	5	5	5	1	1	3	2	2	63.3
S3	4	1									8.3
S4	5	2									11.7
S5	1										1.6
Total											60

It will be obvious that S2 contains the highest number of stretches. This could well be because this was the only recording in which the teacher was actually teaching language (a reading lesson). In this lesson, precise stretches occurred in several places, but they appeared most consistently on the words read from the book as, for example:

m 11 | here # _ | is # _ | Butch # 11 # _ 11 m = precise
| NButch # _ m1, | Nis # m1 # _ m2 | on # _ | a # m2 # m1 = low
| !!farm # 11 # m1 (S2) m2 = rising

The questions asked to arouse interest in the story were frequently marked 'precise'.

a | who do you Nthink# the m
| man might . be# m# (S2) m = precise

or

m p m3 do you m1 |think Butch Nlikes# m = high and narrow
m1 . m1 |watching the farmer m2# ; Ndig# m1 = falling
p# m# m3# m2 = monot
(S2) m3 = precise

Preciseness was heard in reprimands, too:

m |oo^h# |who Ncalled .out# _ I dim m = low
m1 |Nlooked# at |you# . but p |you m2 m1 = rhythmic
m didn't# . |put m2# your hand# , |up# m2 = precise
m1# dim# m# p# (S2)

On two occasions in S2, precise and tense were found together:

f l m | I can hear# . | NRRichards# . | voice#. m = tense
and I do m1 | not want . 'to . 'hear 'it# m1# f# m# l#
(S2) m1 = precise

and

|[̣:]# . |Njust# . a, |moment Richard#. m = tense
we m1 |̄are . trying to do#, |our . reading#m2 = precise
m1# m2# _ you . have |Nplenty #to m1 = falling

|dò# _ m3 you m4 |know what to Ndo#. m3 = rhythmic
 when youve |fìnished# m# 1# m2# m4# m4 = precise
 (S2)

Precisness was heard in all the other school lessons, although to a lesser extent than in S2. The relatively light use made by the kindergarten and broadcasting speakers, could perhaps reflect the different roles of the two types of teachers; emphasis on learning appears to be much stronger in schools than in kindergartens.

Precise stretches did occur in combination with other features. Tempo and pitch were involved, but the numbers concerned here are too small to warrant discussion. However, it does seem helpful to record that "precise" was heard most frequently with low pitch and a slow speed. This latter is perhaps expected - the speed of speech will slow considerably when precise enunciation is demanded. There is little else to be said about this preciseness. Without the thirty eight instances in S2, the number of precise stretches dwindles by more than half. It is significant, however, that clarity of speech was a feature.

The length of these stretches marked rhythmic varied from three words to 49 words, this being the longest. All speakers used this feature to some extent, although it was heard in only twelve of the fourteen recordings. The highest number of rhythmic stretches was heard in the two school lessons intended for new expirant classes. Four of the stretches occurred in passages that rhymed:

m a |!Nmirror# , |Nmirror# a# _ |on'the#, |wall#
 _ |who 'is' the# m1 |Nfairest# m1#. |None'of# m = rhythmic
 |all# m# (S4) m1 = high

and

m l |Nmirror' mirror#. |on'the# |Nwall#. m = rhythmic
 |!who is fairest# l# . |now . 'of# |all# m#
 (S4)

In B1 a similar passage was found:

m2 |into' the# |bowl#. the |butter# and |Nsugar
 go# _ m |beat it up#. |beat it up# _ |beat it m = falling
 |up so# m# _ |next# |come the raisins# _
 the |eggs# _ aa and the aa# |spice# _
 p |mmm# _ m1 m |!this birthday cake smells' m# m = monot
 Nnice# p# m1# _ |Nstir in# the |flour# _ m1 = lax
 |mix# till its |Ndone# _ |making# a m2 = rhythmic
m |Nbirthday 'cake# m# _ is |lots 'of , fun# m2#
 (B1) m = high

K4I was a rhyming story and yet in all only eight rhythmic stretches were recorded. One of these was found in the rhyme that preceded the story:

m m2 p | little Nmousey# | Nbrown# m = rhythmic
m1 1 | Nclimbed up the candelstick# 1# m1 = prosodic
m1# to | Neat up# m2# . a | all the tallow# m2 = low
a# m# (K4I)

Of the rhythmic stretches found in the story itself, (K4II) several were strongly related to intonation and pitch. One of these has been quoted in the section on pitch, (P.69) and its repetition is unnecessary. The following passage, however, demonstrates the extent to which intonation patterns can influence rhythmicity:

m | Nin# they | Nwalked# and | then Nsaid# m = rhythmic
| Nah# | Nwhen# they | Nsaw# the | Ntoys#
and | Ncandy# | and the Ndolls house#.
| from# | !! Npa, pa# m# (K4II)

A similar use was found in S1, but in this case, it was the inclusion of subordinate tone units which suggested the rhythm.

m m1 | Goldi , [locks#]# went | skipping, [up#]# to
the | front, [door#]# of the | !! cottage# m1# m# m = rhythmic
m1 = prosodic
miming

The rise-fall intonation patterns in the following example had the same effect:

m m1 the |^{smell}# of the |^{porridge}# made |^{Gold,i[locks]}#
 feel |^{hungry}# m# m1# (S1I) m = low
m1 = rhythmic

In the passage below from S2, the successive rising nuclei on the articles of the list, and the regular pauses between words marked the rhythmical utterance they were given:

m1 l m |^{monkey}# __ |^{mirror}# __ |^{mushroom}#
 __ |^{matches}# __ |^{marble}# __ m = rhythmic
 |^{matchbox}# __ |^{mouse}# l# m# m1# m1 = with children
 S2)

A similar effect was heard in S1I, with a list of events:

a m |^{mother}# |^{Nbear}# made an |^{other}# |^{big}
^Npot# of |^{fresh} ^Nporridge# n they |^{Nall}#,
 |^{sat} ^Ndown#. and had a |^{lovely}# |^{Nbreakfast}#
 _ |^{!!father}# |^{bear}# |^{mended}# the |^{Nchair}# _ and m = rhythmic
 |^{!!mother}# |^{bear}# |^{Ntidied}# , the |^{Nbeds}# m# a#
 (S1I)

Although many rhythmical stretches occurred in stories, in S2 and S1II they were also used in reading lessons. In S2 most such stretches occurred on

questions:

m a f | !!who Nthinks# it | does# a# f# m# m = rhythmic
(S2)

or

cause m2 m | you can Nsee# the | Ndog# on m2 = rhythmic
the | front# m2# m# m1 | can you# m1# | [J:m]# m = falling
m m1 | what do you Nthink# the | Ndogs# . m1 = rising
| doing# m# m1# m = falling
(S2) m1 = rhythmic

However, many statements carried the same marking,

for example:

m m1 | Ill# m# , | read you# ! the | Nstory# m1# m1 = rhythmic ^{m = high}
a | ready# a# _ p m | Sarah# p# m# m1 l m = high
the | farmer# _ | !!digs# m1# l# (S2) m = precise

When reading from a book, the teacher in S2 preferred to speak with precision rather than rhythmically.

S1II, however, used rhythm. Because some of her class were able to read for themselves, the teacher only read one sentence aloud:

l m | here# _ , | Nis# _ | baby# _ | bear# l# m#
(S1II) m = rhythmic

The sentence is very similar in sound to many of those used in S2. The difference lies in the teachers' use of rhythmicity. A comparable sentence in S2 uses

no rhythm, but is marked "m = precise":

m ll | here# | is# | But# m = precise
(S2)

The remaining speakers used rhythm in a variety of ways which can be best recorded by a set of examples:

m p a | !!and , made him #. | !!king# . of . | Nall# . ,
| Nwild# . , | things# a# m# p# (K2) m = rhythmic

theres an dim m | !!other Negg# be|hind the q m = rhythmic
chair q# dim# m# (B2) q = breathy

well | now# weve come m | right# to the | Nend #
of the | Nprogramme # m# (B2) m = rhythmic

to | Nmake it# the , | same size # . p | !as Nthe#
p# m# | !!two rod # (S3) m = rhythmic

m1 | NIve to get# your m = high
| Notices ready # aa# m# m1# m1 = rhythmic
(S5)

It can be seen from these that in most cases the rhythmic phrases are suggested by pitch, intonation and pausing. Throughout the recordings this tendency was obvious,

Contrary to expectation however, prosodic miming and rhythmicality were found together only a few times; five instances of this combination were recorded, and these were in three stories (K3II, K4I and S1II). This aspect of rhythmicality will be discussed more fully in the section on prosodic miming.

PROSODIC MIMING

Not all speakers made use of prosodic miming. Instances were found in K2 (1), K3II (1), K4I (2), B2 (2), S1I (5), and S3 (2) - making a total of 13 occurrences. The longest stretch was heard in S1I - 54 words in length - and the shortest (one word) in the same recording. Four of the six recordings in which prosodic miming was heard were, as one might expect, stories. B2, however, used prosodic miming to indicate change of mood. This passage has been quoted already (P.79) S3, a mathematics lesson, also made use of this feature. In both cases in S3, prosodic miming was used to reinforce an instruction:

m1 a m | quickly pop them Naway# in. m = falling
the |right boxes# a# m# m1# m1 = rhythmic

and

unstressed 'and' between each verb. S1I, in comparison, made use of subordinate tone units:

m m1 | Góldi, [lòcks#]# wént | skíppíng , [up#]#
 to the | frónt, [dóór#]# of the | !!còttage #
m# m1# m = rhythmic
(S1I) m1 = prosodic
miming

Most examples of rhythmical prosodic miming made use of intonation and pitch features. K4I, however, provides an unusual example, where rhythmical stress is not obtrusive but admirably suited to the action of the mouse:

m m2 p | lítte Nmóusey# | Nbrown# _ m1 1 m = rhythmic
 | Nclímbed 'up' the cándlestíck# 1# m1# m2 = low
(K4I) m1 = prosodic
miming

On the whole, however, prosodic miming did not play a big part in the teachers' English. This does seem a little strange to understand, for it is a feature well suited to provision of variety and contrast. Perhaps the content of the lessons is important; stories and discussions on other subjects might provide more scope for the use of prosodic miming.

Imitation should be mentioned in connection with prosodic miming. Although only 4 occurrences of imitation were heard, I feel it warrants inclusion in this description as one of the most characteristic features of this type of English. Attempted imitation of actual sounds is most rare in adult conversation. B1 and K3II were the only recordings that used imitation. The broadcast speaker confined herself to animal noises:

the |cat# that |Nsays# m |meow#. m = imitation
 |meow# m# and the |Nduck#, that |Nsays# m1 = tense
q1 q m m1 |quack# |quack# m# q# q1# m1# q = nasal
 (B1) q1 = creaky

and

a |lamb# that |Nsays# m q m = imitation
 |maaa# m# q# (B1) q = trembling

The fourth example, in K3II, will be again mentioned under paralinguistic features. It was a most difficult noise to describe - an imitation of machinery that involved several features:

m q m1 | [snort]# q# m1# m# m = imitation
q = husky + creaky
m1 = tense
 (K3II)

SECTION II(1) PARALINGUISTIC FEATURES

The following paralinguistic features were found in the texts:

Creaky

Tremulousness

Breathy

Sob

Husky

Giggle

Nasal.

Of these, only creaky and breathy warrant discussion, for the occurrences of the others belonged largely to individuals. Husky occurred only once, in S3II in that odd 'machine' sound. Sob occurred three times in S1I, twice as the speaker 'acted' the baby bear:

and q1 m |baby bear# |came Nin# . and he m = high
 |still'hadnt# . |stopped Ncryíng# about q1 = sob
 his |porridge# . and he |cried Nagain# .
 |he Nsaid# m# q1# [crying noises] q m f m = very high
 |someones# been |sitting# on |my chair# m# m1 = high
m1 and theyve |broken it# q# m1# f# q = sob

(S1I)

Giggle occurred four times in all - once in K1 and in B2 and twice in S5. For example:

g |thàts# a |funny'game# g# g = giggle
(B2)

|lets prètend# m |Nìve turned# the . |Nàir# m = tense
 . |off#m#
 [children laugh]

g now |Nwhàts goìng to #|happèn# g# g = giggle
(S5)

Nasal occurred three times. One was combined with creaky, imitating the quacking of a duck in B1. The other two were extraordinary examples, peculiar to S4:

|yès# a |Nnót . a# g |glāss q# òne# . |Snow g = nasal
NWhìtes' been 'put# in a g |glāss g#'one#. g = nasal
(S4)

Tremulousness occurred fourteen times. Twelve of these were found in K3II and one in each of B1 and S2. The tremulousness in K3II seemed partly nervousness, although this did not affect the teacher's speech in any other way. This frequent occurrence of tremulousness has been included in the teachers' voice set, since it was not used often among the other teachers.

Creaky occurred 39 times. The following table shows the distribution. Those speakers who made no use of this feature are not included.

Number of Words							Total
	1	2	3	4	5	6	
K1		1					1
K2	1						1
K3II	1						1
B1	2	1					3
B2	2	1					3
S1I	9	1					10
S3	2	1					3
S5	12	3	1	1	1	2	20

Almost 72% of these creaky stretches occurred with other features. Sixteen of the thirty nine (41.03%) were found with low stretches; eight of these occurred in S5, half of the number found in this recording:

m | these 'are # | Nhard, q Nnames 'to 'remember# m = low

q # | arent 'they # m # (S5) q = creaky

or

| what yours Ndoing m q 'Rachel# q # m # q = creaky

(S5) m = low

This combination was found in the broadcast programmes, used in a particularly interesting way:

g I g#p |!!think, hickety pickety# |!!Nmay, z=creaky
Nhave# , |laid one there# (B2)

Beginning the utterance with an unaccented but creaky 'I', meant that the high, soft beginning to the first tone unit came as a pleasant shock awakener. This characteristic was found several times with this speaker, but with no other teacher.

53.85% of the total number of creaky stretches were found with pitch markings; two were high stretches, four falling, and sixteen were low, as mentioned before. Prominence, speed, tension and imitation were also found with creaky stretches; together, however, they total only 46.43%. It is of interest that five of the six occurrences with prominence were found over piano stretches. The sixth was marked forte.

Breathiness was found more frequently than any other paralinguistic feature:

Number of Words										
	1	2	3	4	5	6	7	8	More	Total
K3II			1							1
K4I	3	1					1			5
K4II				1						1
B1	1									1
B2	1									1
S1I	5	4	1	2	1	2			1	16
S2	2	2	3		2	2	1			12
S3		1								1
S4			1	4						5
S5	1	0								1
									Total	44

Two further occurrences were found, but demanded an "inverse breathy" marking, for example:

and (Miss Clavell) said _ q | oh # q # _ q = inverse
 breathy
 p | something # | is Nnot q1 right # q1 # p # q1 = breathy
 (K4I)

"Inverse breathy" was used to describe the quick intake of breath indicating surprise or fear.

S1I and S2 made greatest use of breathiness. Their combined occurrences made up 63.63% of the total

number. All the school teachers used breathiness to some degree, but two of the kindergarten teachers did not. The number found in the ^{other} two kindergarten teachers was not large, which seems to indicate that they place a lesser value upon this type of variation than do the school teachers. K4I, however, showed the same number of breathy markings as did S4. Perhaps, once again, personal preference plays a large part.

86.36% of the total number of occurrences appeared with other features, but the following passages exemplify breathiness alone:

|Miss Clavell # |turned Non# her |Nlight # m = narrow +
rising
m # and |Nsaid# cr # m # q [oh] |something# m = rythm
q # |Nis not#. |Nright# (K4II) q = breathy

Here, of course, breathiness is used to convey anxiety. This example from S5 indicates a certain amount of intimacy by the use of breathiness:

(What other things will we) | want to g # m m = lax
continue with # to | N tomorrow # dim # g = breathy
m # g | Rachel # g # (35)

Of those features found with breathiness, prominence features covered 77%. Most frequently heard was the combination of piano and breathiness. In cases where more than one marking occurred with breathiness, each feature was counted in its own category. Piano with breathiness is easily exemplified:

and a p q |Ntiny little# |baby chair# p#q# q = breathy
(S1I)

or

and |she Nfelt#|!so cosy# p# q# |snug#
and |comfortable# (S1I) q = breathy

and

|!thank the Nlord# m |you are p well# m = low
and now |Ngo'to q Nsleep#q# . (said q = breathy
Miss Clavell) (K4I)

and

q p |chasing what# . , |darling# p# q# q = breathy
(S2)

or

pp q |Nyes# pp# p |!!whats the farmer q = breathy
doing# q# p# (S2)

In each of these examples, the prevailing tone is

intimacy. The effect of the combination is similar to that of ^{the} lax, high and narrow combination mentioned previously. The same soothing, singing quality is present and, indeed, they seem to be used in similar fashion.

Pitch features and breathiness appeared next most frequently, there being fifteen occurrences. Eight of these were marked high; three were low, and rising and falling were heard with breathiness twice each. On only two occasions did pitch features and breathiness appear together without any accompanying markings. These were both high:

and m q | baby bear# m# q# (came skipping q = breathy
in behind them) m = high

(S1I)

and

he went . m q | !right Nby . 'her# q# m# m = high

(K3II) q = breathy

Tempo markings were heard eight times with breathiness. Seven of these were marked lento; the eighth was marked rallentando. In every case tempo markings and breathiness were accompanied by some other feature.

On four occasions tension markings occurred with breathiness. Twice lax was involved, once precise, and once tense. On no occasion did they appear without further supporting markings. The following passage has a strong link with the "cantabile" effect mentioned earlier:

and a p m g m1 | little # p # . , pp | Nbed # m = high
g # pp # | Nwith # . a , q1 | Ngreen 'quilt # g = breathy
m1 # m # q1 # m1 = lax
(S1I) q1 = breathy

On two occasions rhythmicity appeared with breathiness:

not a m2 | single Meye'was [Ndry]# g = breathy
_ a g | NMadeline# g# . was in | his, Narm# m2 = rhythmic

(K4I)

Diminuendo occurred with lento and breathiness just once (S1I), and in S2 there was one example of allegro with piano and breathiness. Of the six combinations of piano, lento and breathy, most were found in S1I, although some were also heard in S4 and S2. For example:

(father bear went up the stairs as quietly
as he could) p l | one# _ | two# _
| three# _ | four# _ q | five# q# _ | six# _ q = breathy
| seven# _ | eight# _ q | nine# _ | ten# q# p# l# q = breathy
(S1I)

and

p q to m | Night# m# _ were | going to m = precise
Nbring# | Npictures# q# p# p | !! just q = breathy
one# p# _ that q p l | beginng the
same# as _ | mother# p# q# (S2) q = breathy

The combinations found only once appeared in the following contexts:

and dim | further# a | Nlong# the
q | path# q# l# dim# (S1II) q = breathy

and

a p q can you | think'of'any# q# q = breathy
(S2)

Pitch, prominence and breathiness in various combinations deserve mention. Out of the total number (7), three involved low pitch and piano; three times piano and high pitch were heard together and once piano, breathiness and rising pitch. For example:

p |so she m couldn't do# q |N[^]anything# m = high
 a|bout'it# m# q# p# q = breathy

(S1I)

and

q p m |Goldilocks#|N[^]felt'a'bit#. |weary# m#
 after |skipping such a Nlong'way# m |through m = high
 the woods# q# p# m# (S1I) q = breathy
m q p what |!!dyou think# m hes m = high
 |going to do# q# p# (S2) q = breathy

These examples show affinity with the lax-"cantabile" feature. The last passage, for example, created a sense of intimacy between teacher and pupil. A similar effect was gained by using low pitch:

m q p |Nooh# . |N[^]I# dont . |Nthink'so# m = low
 |Neither# m# q# p# (S2) q = breathy

and again in:

p m q |Noutside# . were |birds# . [nd] m = low
 |trees# . [and] |sky# m# q# q = breathy

(K4I)

However, the same combination in S1I created excitement:

and q |exciting Nways# to |go in the m = low
 woods# m# q# p# q = breathy

(S1I)

Although paralinguistic features are used comparatively rarely, in this type of English, they do provide variety and allow the teacher to add extra colour to her utterance.

(2) PAUSING

Unvoiced pauses will be discussed under the terms suggested by Quirk:

Brief (marked .)

Unit (_)

Double (__)

Treble (____)

Voiced pauses were transcribed as:

Short: [ϑ \pm n or m]

Long: [ϑ : \pm n or m]

Unvoiced Pauses. These were considerably more frequent than voiced pauses. A total number of 2042 unvoiced pauses were recorded and only six voiced pauses. The distribution of the unvoiced pauses was as follows:

	.	-	--	---
K1	23	20	10	10
K2	62	39	13	5
K3I	10	23	2	
K3II	33	76	15	3
K4I	61	60	18	3
K4II	13	3	2	1
B1	50	70	34	15
B2	63	77	44	10
S1I	100	80	39	22
S1II	34	38	7	12
S2	182	122	20	15
S3	82	32	29	9
S4	106	76	8	10
S5	103	38	9	1
Totals	922	764	250	116

Brief pauses constituted 45.2% of the total. 37.4% were unit pauses. The two longer pauses were heard considerably less frequently than the brief and unit pauses; double pauses constituted 12.2% of the total, while treble pauses made up 5.7%. It must be remembered that these pauses are

relative in their duration to the speed of the speaker's norm.

Treble pauses were found mainly between sentences - about 87% occurred here. The next most popular position was between clauses, but only five such pauses were found. The following passage shows use of intersentence treble pauses:

1 |veryN^good#1# ___ |stick it on #
 ___ aa |!thats right# aa# ___
 |Nno^v # (K1)

Double pauses were heard in much the same sort of positions; 82% occurred between sentences and 10% between clauses. Double pauses occurring in other grammatical positions were few and varied. The following passage shows the use of double pauses both between sentences and between clauses:

and p |M^x # p# the cr |Nking # of |Nall #
 . , |wild Nthings # cr# _ was cr |lonely # cr #
 __ and |Nwanted 'to be # where |someone #
 |loved . him # . |Nb^est of 'all # __ then
 m p |!!all a^round # m# . from p# . |Nfar m = high
 away # across the , |world # _ he, |sm^elled #
 . m f dim |N^good # |things # m# f # dim # m = tense

to |eát#__)!!so#, | hē . gáve !!up# . | being
king#. of |where the wild things are#

(K2)

Unit pauses were also concentrated in the intersentence and interclausal area, but the numerical margin between the two was narrowed further. 66.9% of unit pauses were between sentences and 15% between clauses. 4.5% were found within nominal groups and 2.9% between phrases. The following examples demonstrate unit pauses used in these positions:

|!oh . , oh , a said the mother a#
Nbírd# , my /baby will be Nhere#
|hèll'want'something# to |eát#__ m| NÍ m = narrow +
'must get'something# for my |baby bird falling
to Neát#m# _ |NÍll'be back#
so p m a |Nwáy# she |Nwènt#
m#p# (K3II) m = high

tip |stòeing# with |Nsólemn# |Nfáce#
p#. with |some , l flówers# _ |Nánd'a#
m |Nvase#m# l# _ m |Nín# they m = high
|Nwálked# and |then Nsaid# _ |Nāh#

|N^{when}# they |N^{saw}# the |N^{toys}# m = rhythmic
 and |N^{candy}# and the |N^{dollhouse}#.
 |f^{rom}# |!!N^{pa}, p^a# m# _ but the l |!!b^{iggest}#
 sur |N^{prise}#, by |N^{far}# _ |N^{on}# her
 [s] |N^{tummy}# |was N^a# l# _ m m1 |s^{car}# m = low
m# m1# (K4I) m1 = with children

Pauses between the article and noun (as seen in the last two tone units) were found on several occasions. In many cases the word before the pause was marked "drawled". In K4 most use was made of this feature, but it was not restricted to this speaker. The pause invites the children to join with the teacher and fill in the missing word. The teachers in S1II, S4 and K3, although also reading stories, made little use of this. K4's story, on the other hand, was obviously well known to the children and the teacher's invitation to join in, presumably meant that their attention would be with the story and not elsewhere. In the discussions the teachers were able to use this ruse, but the broadcast programmes showed very little evidence of it. The same result can be brought about by pausing before any important word, as in K3II:

m / !!they /went , Nhome# m# m !and , |Nbroke m=falling
 their #, |Nread# .! and , |brushed !their# m=rhythmic
 |Nteeth# .!and , |went# |!!Nto# m#
m |Nbed#m (K3II) m= with children

Brief pauses occurred a number of times between
 subject and verb with interesting results. In some
 cases it clarified instructions, at other times it
 merely underlined the following verb or verbal group.
 For example:

|!you . Nstir everything in# |well#
 (B1)

m |, I !!didn't# |tell you# . |how# m = low
 to be |teapots# m# . p because I . m |!!think
 , you know# m# p# (B1) m = falling

m |you . , crawl under# the |table# m=falling
 (B2)

Similar emphasis can be placed on a noun or
 nominal group by a brief pause:

|straight to your# , |blackboard#
 and |draw me . Nall# the |rods#
 (S3)

Brief pauses also occurred frequently within a nominal group. Once again, the purpose seemed to be to emphasise:

and . I m | want you to Nfind#,
 the 1 | right . rod# 1# m# . and the m = lax
1 | Ncorrect#. | number# 1# (S3)

The intention seemed the same in the following extract, but because the teacher was speaking slowly the pauses were unit pauses not brief. The passage is one read from a book during a reading lesson:

11 m | here# _ | is# _ | Butch# m = precise
11# _ 11 | NButch# _ m1 , | N is# m1# _ m2 m1 = low
 | on# _ | a# m2# _ | :!farm# 11# m# m2 = rising
 (S2)

Brief pauses occurred mostly between sentences, but these constituted only 25% of the total number. The remaining 75% were distributed over various grammatical constructions. 17.9% were found within nominal groups. 10.5% were within verbal groups and 9% between clauses. About 8% occurred between subject and verb, 5.8% between verb and complement, and 5.3% between phrases. Brief pauses, then, were not only more numerous than other types of unvoiced pause, but

were also, as one might expect, found in a greater variety of places in larger numbers.

Those texts which were read used pauses in more familiar ways than did those that were not. Most pauses, ⁱⁿwhen reading aloud, are dictated by the printed punctuation. The freedom allowed by telling a story is obvious in S111. Some pauses here, though, were the result of the teacher placing pictures on a flannel board; corresponding pauses were observed in the read stories, when the teacher showed the children the illustrations in the book. S1 made good use of pauses; for example in this passage they seemed to contribute greatly to the suspense of the story:

then 1 |father [bear#]# |looked#. |at#
 the . |tén# . |stairs# 1# _ 11 and . m f m = low
 |hè . 'felt # . |véry sus'picious# _ and |véry#.
 |cu'rious# 11# _ 1 and he |Nwént up#.
 the |Ntén# |Nstairs# f# . as |Nquietly# as
 he |Ncould# 1# m# p 1 |oné# _ |two# _
 |thréé# _ |four# _ q |five# q# _ |six# _ q = breathy
 |séven# _ |eight# _ q |niné# _ |tén# q = breathy
q# p# 1# _ p he p# f |lōoked# f#
 _ p in the |béd p# f rōom f# #

(S11)

It was normal for speakers to pause before directing a statement to one child by mentioning his name, for example:

can p m2 |you Ntəll'me# a |little m2 = low
 story'about'it# m2# p# _ m m = high
 |Elizabeth# m# (S3)

This, however, is not restricted to teachers and may be heard in many types of English.

Several other uses of unvoiced pauses were recorded, but these were mainly individual uses, dictated by the situation prevailing. In S5 and S3, for example, the teachers paused while they collected their thoughts:

m1 |right# m1# _ l m |Nboys# m# , m m1 = precise
 |Nfind# . , |Nme# . , |Nthe# m# l |ninerod# m = high
 . |Ngirls# , |Nfind'me# |Nthe# m = falling
 . |eight'rod# (S3)

and

the |ones we Nsaw'in# _ |!!Nwhose |book#
l# _ |Karens'book# . |yours'was'an
 'Ayreshire# (S5)

Most unvoiced pauses, however, were used to definite purpose. The most important functions of

these pauses seemed to be to allow the child to absorb what he has just heard, to emphasise the next word or finally, which appears most characteristic, to allow the children to join in.

Voiced Pauses. Of the six voiced pauses [ʔ] occurred four times, once in S1I, S1II, S2 and S5; [ʔ_m] and [ʔ:m] were both found in S2.

The [ʔ] found in S2 was rather more of a noise to attract attention, than a true voiced pause. S11I, however, demonstrates the voiced pause as it is normally used:

|Nu going# to |close my Neyes# and m = lax
|pick Nout# |one more Nstory# _ |there#
m# . m1 [2] m1# . Ill |!tell you m1 = tense
whàt# (S111)

In the broadcast programmes no true voiced pauses were found, but there were several occasions when a word or phrase was used in place of one:

a now to {play# this {game# we need a#
or (B1)

well . |play' that#you're in |Npouring#
that/Nmixture#|into a tin#

(BT)

These words like "now" and "well" added little to the sense, and appeared to act as stabilisers, more than anything else. While they allowed the teacher time to think, these words avoided either voiced or unvoiced pauses. Such words and phrases were used more in B2 than in B1, possibly because the former differed from the original script considerably and was not always read.

Kindergarten teachers used no voiced pauses. The small number of voiced pauses found among the teachers under discussion here, must surely point to something. Often, it is true, the speakers were reading or reciting something well-known. But could part of the reason not be related to the fact that a voiced pause indicates a certain degree of uncertainty? Such a "weakness" will not go unnoticed by the children, and a teacher cannot risk losing control of her class, to any extent, however small.

(3) EXTRA-LINGUISTIC FEATURES.

The problem of keeping pupils interested extends beyond what the teacher says and how she says it, to what she does at the time. Teachers have to make use of extra-linguistic aids, and some of these I now propose to discuss, not in detail, but in general.

Probably one of the most important is the use of facial expressions - it is also the most difficult to record without the use of a camera. It was impossible to include such features in this dissertation, because of the elaborate detail needed to describe them adequately. One must be mentioned, however cumbersome the report might be. This was seen when S2 was teaching her class the letter 'm'. She asked her class to find words beginning "the same as mother" and as she pronounced the initial letter of the noun she exaggerated the lip positions to demonstrate how to make the required sound. It was interesting to see the children making the same exaggerated movement as they said words beginning with 'm'. For want of a better way, this was transcribed:

|mm̄m # . (S2)

The lesson contained many words beginning with 'm' and each time this physical emphasis was placed on their initial letter.

This teacher also made use of a box of articles from which she chose those beginning with the letter required. This provided something concrete, to which the children could direct their attention. Several teachers used such visual aids. S3, for example, taught mathematics with Cuisenaire rods and number cards. S5 made reference to a book, illustrating concepts with pictures. The flannel board and its figures were used in the same way as the illustrations in a book, bringing the story alive and giving words and names physical referents.

Much use of gesture was found among the teachers. K4, for example, in the discussion of the story in K4I (K4II), pointed as she said:

| on Mher tummy # . p | that's Nright # p # . a | !!right
 , there # you | Nsée # | !!right there #

(K4II)

- to indicate the area where an appendix scar is found.

S1I used gestures perhaps more than any other teacher. She patted the head of the nearest child as

she said:

and | mother # | N^ébear # . | patted # m | baby
 N^ébear # on the | N^éhead # and she | N^ésaid # m # m m = rising
 | there 'there # | baby bear # | I'll make #
 | N^éyou 'some more # m # (S1I) m = lax

As Goldilocks knocked on the door of the three bears' cottage, the teacher knocked on the desk. This unusual noise seemed to startle the children and their attention was drawn to the teacher and her story. It also helped bring the story alive. A similar action occurred when Goldilocks broke the smallest chair:

p g | so she # . , | tried # . the l | little chair # g =
l # p # g # and she was | :! just # , | feeling # | very # ^{breathy}
 | comfortable # m . f | crack # m # f # m = low

(S1I)

The teacher banged her hand on the desk to reinforce the word 'crack'. This again seemed to startle the children. It was interesting to see that this class was the most attentive of all classes recorded. The teacher, in discarding a book, has given herself freedom to vary and enliven the story as she wished. The methods chosen were obviously successful.

This summary of the teachers' extra-linguistic aids is admittedly inadequate, but it does serve to describe part of the teachers' actions. To see the teacher must be one of the best ways of learning, and the broadcasting speaker is here obviously at a disadvantage. The teacher in front of her class can, by facial expression and bodily activity change the character of her utterance, and even this cursory look at her methods can only serve to improve the picture this thesis aims to present.

CONCLUSION.

In the course of this discussion, certain facts have emerged that one can safely say were common to all the teachers studied and distinctive enough to be regarded as characteristic of this variety of English. Corresponding to the different areas of the teachers' responsibility, these features can be divided into two main categories. Obviously the teachers' first aim is to instruct. The methods of education are beyond the scope of this work except in so far as the language of the teacher is concerned. Here the teacher plays an important role, perhaps unwittingly, for the language patterns that she uses can be imitated and so learned by the children under her control. Like the large printing used in teaching children to read and write, the intonation patterns become exaggerated and thus easier to copy - hence the swooping nuclei. This type of movement is definitely characteristic of the teachers' English and is an important part of their role as instructors.

Similar clarity was heard in the precision with which words were enunciated. This involved precise careful pronunciation and in many cases a slow tempo as well. Subtle emphasis was also thrown onto the

word after a pause, thus stressing an important idea or defining the form of the words. As long as the children can hear clearly, imitation and so learning are possible.

With a class full of active young minds, the teacher cannot afford to concentrate on the educative aspects of her utterance. Any monotony of presentation will destroy the value of the lesson; thus the speakers must also strive for variety and contrasts to attract and hold attention. Of the many means of doing this the following were frequently heard. Tone units, for example, were short, introducing accents and emphasis to break the run of the language. Subordinate tone units were used in similar fashion, providing frequent beats that at times became even rhythmical.

No recording used one type of nucleus predominantly. In all cases the numbers of narrow, swooping and ordinary nuclei were distributed fairly evenly, thus dismissing any possibility of repeated movements. Changes of pitch levels were also heard - these were perhaps more obvious than the nuclear variations. In some recordings the teacher varied her voice pitch as the characters in the story changed, thus acting a new

life into the story. Prosodic miming accompanied such pitch movements at times; but one of the most successful variations was rapid change of individual syllable pitch markers to create a lively, often rhythmical utterance. These changes were not of long duration, nor were they regularly or frequently used, but when such contrasts were heard, they caught the ear immediately.

The little use made of *rallentando*, *accelerando*, *crescendo* and *diminuendo* stretches will indicate the extent to which tempo and prominence variations were heard. Choosing sudden rather than gradual changes jolted children into awareness and corresponding attention. Tempo changes, it must be mentioned, were particularly obvious in the broadcast lessons. Speed is not difficult to hear and to use contrasts of this type when the only contact between teacher and child is aural, seems remarkably sensible. However this speaker used no *forte* stretches at all, perhaps because she has to keep no direct control over the class. It must be more profitable to attract attention by sudden softness, rather than the sudden *forte* stretches used by school and kindergarten teachers faced with a busy class. These class room teachers

have also to compete with the children for vocal supremacy. The broadcasting teacher is spared the necessity of making herself heard over the background noise of thirty or so active children. Forte stretches were used in the class room to attract attention, thus creating a contrast which has an immediate effect on the pupils; but even here piano stretches were favoured perhaps because of the many atmospheres that can be created quietly.

Many speakers made use of a special effect involving the "lax" feature; this was a combination of several features - pitch, intonation and tension - whose tone could only be described as "singing". This "cantabile" effect was used to indicate security and even intimacy, narrowing the pupil-teacher gap and adding yet another contrast to the utterance.

Involvement of the children seems to play an important part of the lesson. Using drawled syllables and pauses, the teachers indicated to their classes that they might join in - by putting in the next word. Similar intention seemed behind the many questions asked (and discussions instigated) in nearly every recording; perhaps this also served to occupy the minds of the children, insisting that they attend to the teacher.

Paralinguistic features demanded similar attention. Although many of these features were purely individual uses, breathy and creaky occurred too often to be discarded thus. Breathy, in particular created interesting variations, the most important being a sound reminiscent of the lax-"cantabile" tone mentioned above. Closely connected with the paralinguistic system is the imitation of non-human noises. These seemed to attract attention either as something familiar or as startlingly different sounds. Although not many examples of this were found, it seems an important feature of this type of English, since its usefulness in language generally, is so very restricted. Finally extra-linguistic actions must be mentioned. Facial expressions, gestures and sudden physical action attracted more attention than perhaps any other feature. As an element of surprise these were all important to the teachers; but linguistic emphasis, contrasts and variations ^{also} /seem indispensable in teaching these very young children.

In conclusion, we must look again at the statement quoted early in this discussion:

"make use of the fact that children are naturally interested in something different, in something that contrasts with

the background on which it is placed. Such contrasts can be obtained in many ways - by use of coloured chalks, underlining, italics, gestures or spoken emphasis. It should be noted that emphasis in speech can be obtained in a variety of ways, by speaking loudly, emphatically, solemnly, slowly, softly and so on." (1)

In the last sentence we have a general idea of what can be done with language. This discussion has attempted to describe in detail what this process really entails.

With the results of this description it was hoped to be able to classify the type of English used by teachers of young children as a register. However, in spite of the many distinctive features generally heard among the speakers studied, too much individual differentiation was also found. These idiosyncratic uses tended to obscure the characteristic features of this type of English and so prevented the necessarily

(1) Learning and Teaching - Hughes and Hughes - Longmans 1954 - P 110.

clear outlines of a register appearing. Perhaps an examination of grammar and lexis might reveal definite facts which, combined with the features found in this study of the prosodic and paralinguistic systems, will enable the English of these teachers to be identified as a register.

APPENDIX

The following table shows the numbers of each type of nucleus found in each recording:

	\diagup	\diagup^N	\diagdown	\diagdown^N	\wedge	\wedge^N	\vee	\vee^N	$\overline{}$	\diagup	\diagup^N	\diagdown	\diagdown^N
K1	14	15	41	26	8	0	1	2	0	1	6	8	4
K2	23	49	39	8	3	1	2	1	0	4	11	2	5
K3I	9	11	13	3	1	0	1	0	0	6	3	3	2
K3II	15	43	23	77	3	10	1	1	0	4	20	1	5
K4I	26	91	19	41	3	16	1	1	1	2	21	2	3
K4II	4	12	7	12	0	4	0	1	0	0	2	0	3
B1	82	29	123	43	8	3	12	0	4	15	6	8	1
B2	65	48	147	29	1	0	17	1	2	12	51	9	6
S1I	52	29	57	24	7	2	1	0	0	9	10	7	2
S1II	113	176	167	36	51	11	20	2	0	28	11	12	5
S2	136	86	158	90	5	7	11	1	5	16	12	3	3
S3	55	39	95	23	3	1	2	2	0	5	9	8	2
S4	115	56	97	43	21	2	11	0	0	13	7	4	0
S5	38	44	107	41	14	0	5	2	0	18	10	8	9

Notes: (i) Compound nuclei total 391 - 10.91%

(ii) Subordinate nuclei total 71 - 1.98%